

LOGITECH

SCANMANTM

PLUS



HAND-HELD
SCANNER
USER'S
MANUAL

Logitech Warranty and ScanMan Registration Card

Name _____

Company _____

Address _____

City, State, Zip _____

Daytime Phone # _____

Product Information

ScanMan Plus Ser. # _____

ScanMate Ser. # _____

Date Purchased _____

What type of computer do you use?

- _____ IBM PC/XT or compatible
- _____ IBM PC/AT or compatible
- _____ IBM PS/2 Model 25 or 30, or compatible
- _____ IBM PS/2 Model 50 or above, or compatible

Type of Graphics Adapter:

- _____ Hercules Graphics Card
- _____ CGA
- _____ EGA
- _____ MCGA
- _____ VGA

Other (please specify) _____

Type of mouse:

- _____ Logitech Mouse
- _____ Microsoft Mouse
- _____ MSC Mouse (Mouse Systems)
- _____ Not using a mouse

Other (please specify) _____

What features are important in a hand held scanner? (please rank all of the following: 1= most important, 6= least important)

- _____ Ease of use
- _____ Resolution
- _____ Speed
- _____ Character Recognition Ability (OCR)
- _____ Scanning Window Size
- _____ Software Compatibility

How did you learn about ScanMan?

- _____ Magazine Advertisement
- _____ Magazine Article/review
- _____ Dealer
- _____ Trade Show
- _____ Word of Mouth

Other (please specify) _____

How much would you pay for software that would recognize and input text (OCR) using ScanMan?

- _____ Not interested in OCR software
- _____ \$99 or less
- _____ \$100 to \$199
- _____ \$200 to \$299
- _____ \$300 to \$399
- _____ \$400 or more

What application software will you use most with ScanMan Images (please choose one)?

- _____ PaintShow Plus (Logitech)
- _____ Other Paint program (please specify) _____
- _____ PFS: First Publisher (Software Publishing)
- _____ Ventura Publishing
- _____ Page Maker (Aldus)
- _____ Other Desktop Publisher (please specify) _____

Where will you use ScanMan?

- _____ Primarily at Work
- _____ Primarily at Home
- _____ Both Equally

Why did you choose the Logitech hand-held scanner over its competitors? (Choose the single most important feature)

- _____ Superior Software Features
- _____ Superior Hardware Features
- _____ Logitech's reputation for quality and support
- _____ Ergonomics (Shape and feel of the scanner)
- _____ Price

Other (please specify) _____

What do you consider the most important area of improvement that ScanMan should address?

- _____ Larger scanning window
- _____ Higher resolution
- _____ Add-on OCR software
- _____ Faster Scanning Speed
- _____ Better Shape

Other (please specify) _____

Thank you for your help in improving our scanner product line. Please add additional comments and suggestions below:
[For Product Support questions, please see Appendix B in your manual.]

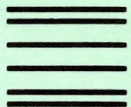
Thank you for registering your ScanMan. By filling out and returning this card, you will receive advance notification of program updates and special upgrade offerings.

BUSINESS REPLY MAIL

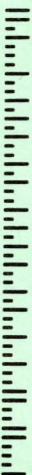
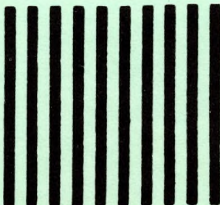
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ScanMan™ Plus

User's Manual



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This edition applies to the ScanMate™ software, version 1.2 or later.

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This edition applies to the following FCC ID numbers:

DZL6QBSCNR
DZL6QBSCNR2
DZL6QBVSCNR
DZL6QBVSCNR2

Certified to comply with the limits for a Class B computing device pursuant to Subpart J of Part 15 of FCC Rules. See instructions in FCC Statement if interference to radio reception is suspected.

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This equipment generates and uses radio frequency and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna.
- Relocate the computer with respect to the receiver.
- Move the computer away from the receiver.
- Plug the computer into a different outlet so that the computer and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:

"How to Identify and Resolve Radio-TV Interference Problems"

This booklet, # 004-000-00345-4, is available from:
U.S. Government Printing Office,
Washington, D.C., 20402.

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Notes:

Introduction

The ScanMan™ Plus hand-held scanner (available only from Logitech) for the IBM PC, IBM PS/2, and compatibles adds a new dimension to your graphics capabilities. The ScanMan Plus lets you scan photos, drawings, newspaper clippings, illustrations, logos, and virtually any image that lays flat on your desktop. Once you have scanned the image, you can either edit and print the image from a paint program or import the image into a desktop publishing program.

The ScanMan Plus scanner provides a 4.1-inch wide scanning window that lets you scan images up to 14 inches long. You can set the scanning resolution from 100 to 400 dpi, and choose from three dither settings for scanning images with up to 32 shades of gray, or a line-art setting for scanning black-and-white images. You can scan in real-time display, which means you immediately see on screen what you scan. The ScanMan Plus scanner is compatible with many OCR (optical character recognition) software packages.

The accompanying ScanMate™ software lets you scan from three environments:

- The PaintShow™ Plus program (available only from Logitech), which lets you edit, save, and print your image. A 16-color paint palette, 20 graphic tools, 8 fonts in 6 styles, and 12 sizes make PaintShow Plus perfect for enhancing scanned images. See the *PaintShow Plus 2.2 User's Manual* for more information.
- The WScan utility, which operates under Microsoft® Windows. You can save a scanned image in TIFF, PCX, or MSP file format, and copy it to the Clipboard for pasting in other Windows applications.
- The DosScan utility, which lets you scan from the DOS command line directly to a TIFF, PCX, or IMG file.

Quick Start - IBM PC/XT, AT, PS/2™ (Models 25 and 30)

If you are an experienced computer user, follow these instructions to get started. More detailed instructions are in *Chapter 1*.

Step 1: Make a working copy of the ScanMate program disk. Store your original program disk and use the working copy for software installation.

Step 2: Run the ScanMate installation program. Insert your working copy of the ScanMate disk in drive A. At the A:> prompt, type:

SCANINST

From the first screen, select **I:Install**, then follow the instructions to install the software and configure the ScanMan interface board.

Step 3: Install the ScanMan Plus interface board. Do this after you turn off your computer, and disconnect all power sources. *Do not replace your computer cover until you run the Scan Test.*

Step 4: Plug the scanner into the interface board connector. First, remove the plastic connector cover.

Step 5: Start your computer, and run the Scan Test. From the directory where you installed the ScanMate software, type:

SCAN TEST

This displays the **SCAN** screen, and turns your scanner on. Scan an image from *Appendix D*. Position your scanner, then press and hold the Scan button at the left while you slowly roll the scanner down over the image from top to bottom. Press any mouse button or keyboard key to turn the scanner off. Press **[Esc]** to quit and return to the DOS prompt. If you encounter a problem, see *Chapter 1, Section 1.4*.

Step 6: Turn your computer off, and replace the cover.

Step 7: Start your computer, and scan. To scan from the PaintShow Plus program, see *Chapter 3*. To scan from the WScan Utility, see *Chapter 4*. To scan from the DosScan Utility, see *Chapter 5*.

Quick Start - IBM PS/2™ (Models 50 and above)

If you are an experienced computer user, follow these instructions to get started. More detailed instructions are in *Chapter 1*.

Step 1: Make a working copy of the ScanMate program disk. Use your working copy for software installation.

Step 2: Install the ScanMan interface board and connect your scanner. Do this after you turn off your computer, disconnect all power sources, and remove your computer cover. *Do not replace the cover until after you run the Scan Test.*

Step 3: Run the Reference Disk to configure your computer. Start your computer with a working copy of your Reference Diskette in drive A. Follow the instructions on the screen to copy an option diskette, and run the auto configuration.

Step 4: Run the ScanMate installation program. Insert a working copy of the ScanMate disk in drive A. At the A:> prompt, type:

SCANINST

From the first screen, select **I:Install**. Follow the instructions on the screen, to install the software.

Step 5: Run the Scan Test. From the directory where you installed the ScanMate software, type:

SCAN TEST

This displays the **SCAN** screen, and turns your scanner on. Scan an image from *Appendix D*. Position the scanner, then press and hold the Scan button at the left while you slowly roll the scanner down over the image from top to bottom. Press any mouse button or keyboard key to turn the scanner off. Press **[Esc]** to quit and return to the DOS prompt. If you encounter a problem, see *Chapter 1, Section 1.4*.

Step 6: Turn your computer off, and replace the cover.

Step 7: Start your computer, and scan. To scan from the PaintShow Plus program, see *Chapter 3*. To scan from the WScan Utility, see *Chapter 4*. To scan from the DosScan Utility, see *Chapter 5*.

How to Read This Manual

The following conventions are used in this manual:

Keys Keys to be pressed look like this:

F **spacebar** **↵Enter** **← Backspace**

Key Combinations Control key combinations look like this:

Alt-F **Alt-F4** **Alt-S** **PgUp**

Screen text Screen output looks like this:

Scanner Enabled



File Names File names look like this:



SCANINST.EXE **WSCAN.EXE** **SCAN.EXE**



Input Keyboard input is in upper case and looks like this:



SCAN TEST **↵Enter**

Menu Options Menu options in the text appear in bold text, for example select **Exit** from the **File** menu.


Mouse buttons You can use a two-button  or three-button  mouse. Throughout this manual, we show the three-button standard:


 means press the left mouse button, or press  on a two-button mouse.



 means press the middle mouse button, or press  on a two-button mouse.

 means press the right mouse button, or press  on a two-button mouse.

"Point" To "point" means to position or move the mouse cursor over a screen item.

"Click" To "click"  " means to quickly press and release the left mouse button to select or execute a screen item.

"Double Click" To "double click"  " means to quickly press and release the left mouse button twice to select or execute a screen item.

"Drag" To "drag" the mouse, means to press and hold a mouse button, usually , while you move the mouse cursor on the screen, then release  to complete the drag action.

Package Contents

Your ScanMan™ Plus package includes the following:

- A ScanMan Plus hand-held scanner.
- A ScanMan interface board.
- ScanMate™ and PaintShow™ Plus program disks:
 - 5.25-inch version for IBM PC/XT, AT, PS/2 (Models 25 & 30) and compatibles.
 - 3.5-inch version for IBM PS/2 (Models 50 & above) and compatibles.
- A ScanMan Plus User's Manual (the manual you are now reading), which includes a User Registration Card and a 3.5-inch disk coupon.
- A PaintShow Plus User's Manual, which includes a User Registration Card.

Registration Card

Please fill out and return the ScanMan Plus User Registration Card. As a registered user, you will receive the latest information about product enhancements and announcements about new products.

3.5-inch Disk Coupon

If you purchased the IBM PC/XT, AT, PS/2 (Models 25 & 30) and compatibles version of ScanMan Plus, and you need the 3.5-inch disk format, please fill out and return the coupon attached at the end of this manual.

What's in this Manual

The ScanMan™ Plus User's Manual is divided into the following sections:





- Chapter 1* How to install the ScanMate software and ScanMan Plus interface board, and how to connect the scanner for IBM PC/XT, AT, PS/2 (Models 25 and 30) systems and for IBM PS/2 systems (Models 50 and above).
- Chapter 2* How the ScanMan Plus scanner works.
- Chapter 3* How to scan from the Paintshow Plus program.
- Chapter 4* How to scan from the WScan utility that runs under Microsoft Windows.
- Chapter 5* How to scan from the DosScan utility that lets you scan from the DOS command line directly to a TIFF, PCX, or IMG file.
- Appendix A* System Requirements and Technical Specifications.
- Appendix B* Logitech's Product Support Plan.
- Appendix C* The Scanner Driver.
- Appendix D* Scan Image Gallery.
- Appendix E* Common Questions and Answers.


Chapter 1

Installation

Step by step, this chapter tells you how to install the ScanMate software and the ScanMan Plus interface board, and how to connect the ScanMan Plus scanner with IBM PC systems and with IBM PS/2 systems (Models 50 or above).


Your ScanMate program disk includes an installation program – SCANINST.EXE – to help you install the software and configure the interface board easily. SCANINST automatically detects what type of system you are using. If you have already installed earlier versions of the software, SCANINST reads your scanner configuration file for the current settings.

You can run SCANINST with a mouse or from your keyboard. To run SCANINST with a mouse, you must have a compatible mouse driver. See *Appendix A*. To select an option with your mouse, highlight it and click . To select an option from your keyboard, use the cursor keys to highlight it, then press . Or, press the key that corresponds to the letter or number at the beginning of the option. For example, to select 3:300 dpi, press , then press .

 If you have an IBM PC/XT, AT, PS/2 (Models 25 and 30):

1. Install the ScanMate software.
2. Install the interface board.
3. Connect the scanner.
4. Run the Scan Test.

See *Section 1.1* for installation instructions.

 If you have an IBM PS/2 (Models 50 and above):

1. Install the interface board.
2. Connect the scanner.
3. Run your Reference Disk to configure your computer.
4. Install the ScanMate software.
5. Run the Scan Test.

See *Section 1.2* for installation instructions.

Before you Begin

- You'll need a screwdriver to remove your computer cover and the expansion slot cover.
- For IBM PC/XT, AT, PS/2 (models 25 and 30) – Take the ScanMan interface board out of its wrapper and place it near you. You'll need to check the jumper settings, and you may have to set jumper settings. The ScanMate installation program walks you through the configuration process.

Make a Working Copy of your Program Disk

Run the SCANINST program using a copy of your original program disk. Put a write-protect tab on your original disk. Then back up your original program disk, using the DISKCOPY command. (Your DOS User's Manual explains how to use the DISKCOPY command.) Label your working copy and store the original program disk in a safe place.

If You Have A Dual-Floppy System

- Prepare a blank formatted disk labeled "Installed ScanMate Software" to use during the software installation procedure. (Your DOS manual explains how to format disks using the FORMAT command.)
- Prepare additional blank formatted disks for storing files that you create.

Read the README.SM File

Please read the README.SM file for late-breaking information that may not have been available when this manual went to press. Use a text editor, or from the A:> prompt, type:

```
TYPE README.SM 
```

Then, quickly press to stop scrolling. Press again to start scrolling.

You can also print the README.SM file using the DOS PRINT command. At the DOS prompt, type:

```
PRINT README.SM 
```


1.1 Installation Procedure - IBM PC and Compatibles

1.1.1 Install ScanMate Software

Follow these steps to install the ScanMate software.

Step 1: Load the SCANINST program. Insert your working copy of the ScanMate program disk into drive A. From the A:> prompt, type:

SCANINST

Step 2: From the first screen, select I:INSTALL. Click ☐ ☐ ☐ on I:Install, or press .

Step 3: Specify the drive from which you start your computer. If you have a dual floppy system, select drive A. If you have a hard disk system, select drive C.

Step 4: Specify the path to install the ScanMate™ software. To accept the default C:\PSPLUS path, press . To specify a new path, press to clear the field, type in a new path, and press .

Dual floppy disk users: type in B:\PSPLUS or a desired path, and insert your disk labelled "Installed ScanMate Software" in drive B.

SCANINST creates the directory that you specify if it doesn't already exist. SCANINST warns you if the directory you specify already exists, because it overwrites existing files with the same name.

Step 5: Indicate whether you have version 1.0 or 1.1 of the software. If so, enter the path where you keep the SCANNER.CFG file. SCANINST reads the file for scanner configuration data. If not, SCANINST installs the ScanMate software to the path that you specify and assumes the default settings.

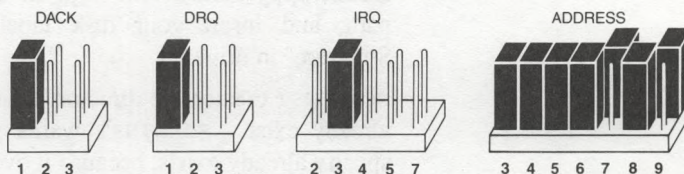
You see the files display as they are installed in the path that you specified. SCANINST installs the device driver – HHSCAND.SYS – to the root directory of the drive that you start your computer from.

Step 6: Select your scanner type. If you are installing the ScanMate software for the first time, SCANINST assumes that you have **A:ScanMan Plus 100-400 dpi** scanner. However, if you already have version 1.0 or 1.1 of the software installed in your system, SCANINST selects your scanner type from the data it reads in your **SCANNER.CFG** file.

Step 7: Confirm the current configuration settings. If SCANINST cannot find or determine a configuration value automatically, it assumes a factory default setting. The default settings are as follows:

Scanner Type:	100-400 dpi
Default Resolution:	200
Board's Base I/O Address:	280
Interrupt Request (IRQ):	03
DMA Channel:	1

The default Base I/O Address, IRQ, and DMA Channel settings correspond to the jumper settings on the interface board, as shown.



- ☛ If the settings are correct, select:
A:Accept current configuration, and go to Step 13.
- ☛ To change the settings, select:
C:Change Current Configuration, and perform Steps 8 to 13.
- ☛ To reset to the factory default settings, select:
R:Reset to factory Settings.



Step 8: Select your scanner type. Accept or change the highlighted scanner option.

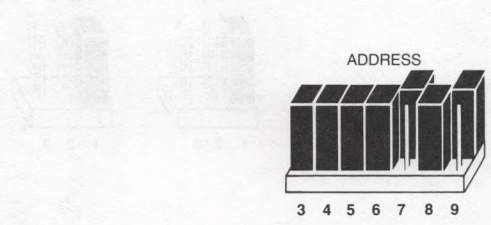
Step 9: Specify the default resolution setting. This will be set each time you turn on your computer. The available options are 1:100 dpi, 2:200 dpi, 3:300 dpi, or 4:400 dpi.

Step 10: Specify the board's Base I/O Address. The default address is 280H (hexadecimal). If this conflicts with other devices in your system, you can change the default. Other available addresses include 2A0H, 330H, and 340H.

Make sure the address jumper block on the interface board matches your selection. If you select the default address (280H), jumpers must cover pinsets 3, 4, 5, 6, and 8. Jumpers for pinsets 7 and 9 are disabled and placed on only one pin, as shown.

Addresses and appropriate jumper settings are:

Address	Pinsets Covered
280H	3, 4, 5, 6, 8
2A0H	3, 4, 6, 8
330H	3, 6, 7
340H	3, 4, 5, 7



Step 11: Specify the DMA channel. Select **N: No Change** to keep the current setting. Or, choose DMA channel **1** or **3**. The default setting is channel **1**.

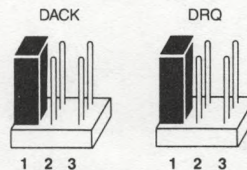
DMA Channel **2** cannot be used, because it is reserved for the floppy drive controller. Do not select setting **3** if you have an IBM/XT with a hard disk or a PS/2 (model 25 or 30), because it is reserved for the hard disk.

We recommend the following settings:

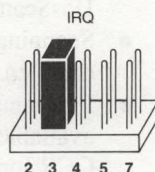
Computer	DMA Setting
AT	1 or 3
PC, XT or PS/2 (model 25 or 30)	
without hard disk	1 or 3
with hard disk	1

Change the DACK (DMA ACKnowledge) and DRQ (DMA ReQuest) jumper blocks on the interface board to match your selection. The DMA default is channel **1**, on pinset **1**.

DACK and DRQ settings *must be the same*. If you change DRQ to pinset **3** (channel 3), you must also change the DACK jumper block to pinset **3**.



Step 12: Specify an interrupt request level. The IRQ (Interrupt ReQuest) jumper is a block with five pinsets labeled 2 through 5 and 7. The factory default setting is **IRQ3**, as shown below.



A blinking cursor on the screen marks the interrupts that are available for you to use. Use the following table to determine the jumper settings that *cannot* be used in your system.

If you have ...	Cross out Pinset
IBM PC/XT (Hard Disk)	5
IBM PC/AT	2
IBM PS/2 (Model 25, 30)	5
IBM PS/2 (Model 30/286)	2
Serial Adapter on COM1 (1st Serial Port)	4
Serial Adapter on COM2 (2nd Serial Port)	3
Enhanced Graphics Card (EGA or VGA)	2
Parallel Printer Port #2 (LPT2)	5
Parallel Printer Port #1 (LPT1)	7

2	3	4	5	7
---	---	---	---	---

Place the jumper clip on a pinset that is *not* crossed out in the table above.

Note: You can *share* the pinset dedicated to LPT1 (pinset 7) or LPT2 (pinset 5) as long as you don't use the printer connected to that port at the same time.

☞ If you cannot avoid a conflict, or do not wish to set an interrupt, select **0:No Interrupt**. However, you should know that if you do not select an IRQ, then:

- Real-time display in the PaintShow Plus program, the DosScan Utility, and the WScan Utility is disabled.
- Scanning from the PaintShow Plus Auxiliary screen is disabled.
- Programs that scan to disk (handle images larger than the available memory) will not work. This includes several OCR (optical character recognition) packages.

Therefore, we recommend that you reconfigure the interrupt jumper and use the "No Interrupt" mode only as a solution when all of the available interrupts are assigned.

Step 13: Confirm the current configuration. Accept or change the current configuration settings.

Step 14: Examine your interface board. If you haven't already done so, remove the interface board from its wrapper. The diagram on screen should match the jumper settings on your interface board. If so, select **C:Confirm Configuration**, and go on to *Step 14*. If not, change the jumpers to match, or select **R:Revise Configuration** and revise the software configuration.

Step 15: Add the device driver string to your CONFIG.SYS file. Select **A:Automatic** to have SCANINST add the string to your CONFIG.SYS file. Select **M:Manual** to add it yourself later. If you choose to add it later, please write it down so you'll remember it. See *Appendix C* for more information about the scanner driver.

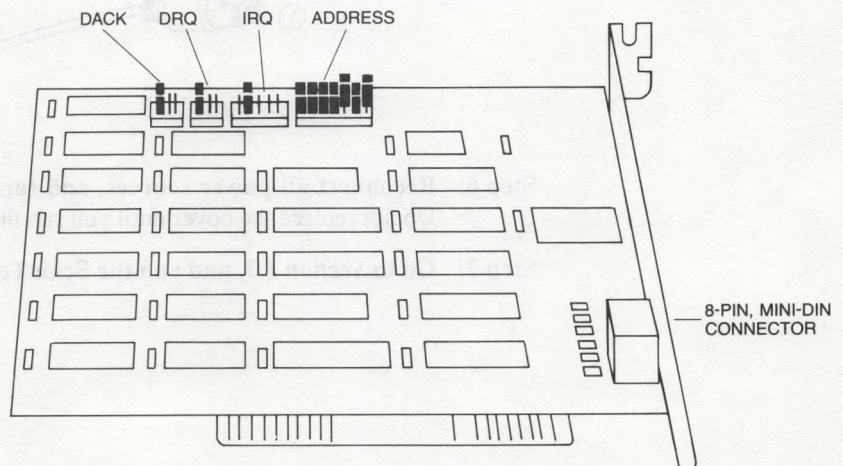
Step 16: Quit the installation program. Select **Q:Quit**. Remove all disks from the drives. Then go to *Section 1.1.2* to install the interface board and connect the scanner.

1.1.2 The ScanMan Plus Interface Board

The half-slot interface board for IBM PC/XT, AT, PS/2 (models 25 and 30) and compatibles – has four jumper blocks that you should check and/or set. They are labeled DACK, DRQ, IRQ, and ADDRESS, respectively. The installation program walks you through the configuration process.

Each block includes sets of jumpers. A jumper is two pins which can be covered by a plastic jumper clip. Each pin set is numbered on the board. When the clip covers a pin set, the jumper is on. When the clip covers only one pin, or is missing altogether, the jumper is off. To reconfigure a jumper setting, carefully pull the clip off with your fingers, then place it on the appropriate pin set.

The factory default jumper settings are illustrated below.



1.1.3 Install Interface Board and Connect Scanner

- Step 1:** Turn off your computer, and disconnect all power sources.
- Step 2:** Remove your computer cover. Consult you computer user's manual for instructions.
- Step 3:** Remove the expansion slot cover. Use a screwdriver to remove the expansion slot cover.
- Step 4:** Plug in the interface board. With the connector bracket toward the back of the computer and the gold strip end down, firmly plug the interface board into the expansion slot. Then, tighten the screw.
- Step 5:** Plug the scanner cable into the interface board connector. Remove the plastic protector from the scanner plug. Plug it into the interface board connector. Position the arrow to the left when you face the back of your computer.



- Step 6:** Reconnect all power sources, and turn your computer on. Do not replace the cover until you run the Scan Test.
- Step 7:** Go to *Section 1.3*, and run the Scan Test.

1.1.4 Reconfigure the Software and Interface Board

If you need to change the ScanMate software configuration again, remember to change the jumper settings on the ScanMan interface board at the same time. To do so, follow these steps:

- Step 1:** Remove the ScanMan interface board. Turn off your computer, and disconnect all power sources. Remove the computer cover. Disconnect the scanner, and unplug the interface board. *Keep the cover off.*
- Step 2:** Load the ScanMate installation program. From the directory where you installed the ScanMate software, type:
`SCANINST`
- Step 3:** Run the Setup procedure, and change the interface board jumpers. From the first installation screen, select **S: Setup**. Follow the instructions to change the current configuration. Set the appropriate jumpers on the interface board.
- Step 4:** Confirm the jumper settings. Make sure that the jumper settings you set on your interface board match the diagram on the screen. If so, select **C: Confirm Configuration**, and go on to *Step 6*. If not, select **R: Revise Configuration**, and change the jumpers to match. Or, revise the software configuration.
- Step 5:** Update your `CONFIG.SYS` file. Select **A: Automatic** to have `SCANINST` update the device driver string in your `CONFIG.SYS` file. Select **M: Manual** to update it yourself.
- Step 6:** Quit the installation program. Select **Q: Quit**. Remove all disks from the drives. Turn off your computer and disconnect all power sources.
- Step 7:** Reconnect all power sources, and turn your computer on. Do not replace the cover until you run the Scan Test.
- Step 8:** Go to *Section 1.3* to run the Scan Test.

1.2 Installation Procedure - IBM PS/2 and Compatibles

This section tells you how to install the ScanMan Plus full-slot interface board and the ScanMate software in IBM PS/2 systems (models 50 and above) with MCA (MicroChannel Architecture).

1.2.1 Install Interface Board and Connect Scanner

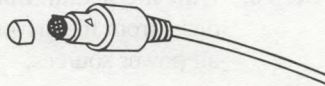
Step 1: Turn off your computer, and disconnect all power sources.

Step 2: Remove your computer cover, then remove the expansion slot cover. See your user's manual for instructions.

Step 3: Install the full-slot interface board. With the connector bracket toward the back of the computer, and the gold strip end down, firmly press the interface board into the expansion slot connector until it clicks into place. Then tighten the screw.

Step 4: Replace your computer cover, and reconnect all power sources.

Step 5: Connect the ScanMan Plus scanner. Remove the plastic cover from the scanner plug, as shown. Plug the scanner into the interface board connector. Position the arrow on the scanner plug to the left when you face the back of your computer.



1.2.2 Configure Your Computer

IBM PS/2 systems (Models 50 and above) have a configuration program that automatically configures your computer for the interface board. The configuration program is on your Reference Diskette.

Step 1: Run the Reference Diskette. Your computer must be OFF to start this procedure. Insert a working copy of the Reference Diskette in drive A, and turn your computer on.

Step 2: Follow the instructions on your screen. When asked if you want to automatically configure the system, select **N** for NO.

Step 3: Select Copy an Option Diskette from the main menu. When prompted to do so, remove the Reference Diskette and insert the ScanMate program disk into drive A. Then, press .

When prompted to do so, remove your ScanMate diskette and re-insert the Reference diskette into drive A. Press .

This copies the ScanMate setup file – @6DAC.ADF – onto the Reference Diskette.

Step 4: Select Set Configuration from the main menu. The Set Configuration screen appears.

Step 5: From the Set Configuration screen, select Run Automatic Configuration. If the following warning message appears:

changes being reset to their normal settings

press to continue. Then, follow the instructions on the screen.

Step 6: Quit the Set Configuration screen. To do so, press .

Step 7: Restart the computer. Remove the Reference Diskette *first*, then press . This ends the software configuration, and you are returned to the DOS prompt.

Note: If you have installed an interface board with a similar default address as the ScanMan interface board, the configuration on that board may be lost.

1.2.3 Install ScanMate Software

Step 1: Load the SCANINST program. Insert your working copy of the ScanMate program disk in drive A. From the A:> prompt, type:

SCANINST

This takes you to the first installation screen. Follow the instructions on the screen.

Step 2: From the first screen, select I: Install. Click ☐ ☐ ☐ on I: Install, or press .

Step 3: Specify the drive from which you start your computer. (This is the drive where you keep your CONFIG.SYS file.)

Step 4: Specify the path to install the ScanMate software. To accept the default C:\PSPLUS path, press . Press to clear the field, type a new path, then press .

SCANINST creates the directory that you specify if it doesn't already exist. SCANINST warns you if the directory you specify already exists, because it overwrites existing files with the same name.

Step 5: Indicate whether you have version 1.0 or 1.1 of the software. If so, enter the path where you keep the SCANNER.CFG file. SCANINST reads the file for scanner configuration data. You see the files display as SCANINST installs them. SCANINST copies the device driver - HHSCAND.SYS to the root directory of the drive that you start your computer from.

-
- Step 6:** Select your scanner type. If you are installing the ScanMate software for the first time, SCANINST assumes that you have **A:ScanMan Plus 100-400 dpi** scanner. However, if you already have version 1.0 or 1.1 of the software installed, SCANINST selects the scanner type from the data it reads in your **SCANNER.CFG** file.
- Step 7:** Confirm the configurations settings. Select **A:Accept** current configuration.
- Step 8:** Add the device driver string to your **CONFIG.SYS** file. Select **A:Automatic** to have SCANINST add the string to your **CONFIG.SYS** file, or select **M:Manual** to add it yourself later. If you choose to add it later, please write it down so you'll remember it. See *Appendix C* for more information about the scanner driver.
- Step 9:** Quit the installation program. Select **Q:Quit**. Remove all disks from the drives, then restart your computer.
- Step 10:** Go to *Section 1.3*, and run the Scan Test.

1.3 The Scan Test

Follow these steps to make sure the software and interface board are configured and installed correctly:

Step 1: Run the Scan Test. From the directory where you installed the ScanMate software, type:

SCAN TEST

This displays the **Scan** screen and turns your scanner on. You should see the light in the Scanning window.

Step 2: Scan and image. (Appendix D contains several images that you can scan.) Position the scanner window above the image. Press and hold the Scan button at the left on the scanner while you slowly roll the scanner down over the image from top to bottom. See *Chapter 2, page 31* if you are not sure how to do this. Press any mouse button or keyboard key to turn your scanner off.

Step 3: Quit the Scan screen. Press to quit and return to the DOS prompt.

☞ If you encounter a problem, see *Section 1.4, If You Need Help*.

1.4 If You Need Help

This section describes how to solve two common problems you may encounter when you install your scanner.

1.4.1 Computer won't boot properly

There may be an address conflict between the scanner and another device in your computer. If you have IBM PC/XT, AT, PS/2 (model 25 or 30), go to *Section 1.4.1.1*. If you have an IBM PS/2 system (models 50 and above), go to *Section 1.4.1.2*.

1.4.1.1 IBM PC/XT, AT, PS/2 (Model 25 or 30)

Step 1: Turn off your computer and disconnect all power sources. Remove your computer cover and unplug the scanner.

Step 2: Remove the interface board.

Step 3: Reconnect all power sources, and turn on your computer.

Step 4: Run the ScanMate installation program. From the directory where you installed the ScanMate™ software, type:

SCANINST

From the first installation screen, select **S: Setup**. Follow the instructions on the screen. Check the board's base I/O address setting. If the jumper settings on the interface board match the diagram on the screen, choose another available jumper setting.

Step 5: Turn off your computer, and disconnect all power sources.

Step 6: Plug the interface board into the computer and connect the scanner.

Step 7: Connect all power sources, and turn on your computer.

Step 8: Go to *Section 1.3*, and run the Scan Test.

1.4.1.2 IBM PS/2 (Models 50 or above):

Make sure that you:

- Securely plug the interface board into the expansion slot as described in your computer user's manual. See *Section 1.2.1*.
- Run the Reference Diskette to configure your computer properly. See *Section 1.2.2*.

1.4.2 Scanner Window Doesn't Light Up

If the scanner light did not turn on, or the message: "**Scanner Error**" appeared on your screen and you were unable to scan when you ran the Scan Test — check this list for possible solutions.

- ✓ Make sure that your scanner is plugged into the ScanMan interface board connector correctly.
- ✓ Make sure that the interface board is firmly seated in the expansion slot connector.
- ✓ Did you install the ScanMate software?
- ✓ Did you restart your computer since you ran SCANINST?
- ✓ Run **SCAN TEST** from the drive and directory where you installed the ScanMate software (unless you include the directory in your PATH statement). Make sure you type the **SCAN TEST** command correctly.
- ✓ Run **SCANINST** again. From the first screen, select **S:Setup**, then double check and confirm the configuration settings.

☛ If you have:

- IBM PC/XT, AT, PS/2 (model 25 or 30), go to *Section 1.4.2.1*.
- IBM PS/2 system (models 50 and above), go to *Section 1.4.2.2*.

1.4.2.1 IBM PC/XT, AT, PS/2 (Models 25 or 30):

Check the ScanMan interface board to ensure that:

- ✓ All board settings match the settings specified in the SCANINST program.
- ✓ The DMA jumpers (DACK and DRQ) are set to the *same* channel.
- ✓ The board's Base I/O Address for the scanner is not in conflict with an address assigned to another device in your computer. (To check this: run SCANINST, choose another address, reset the address jumper block on the board, re-install the board, and run the Scan Test again.)

1.4.2.2 IBM PS/2 (Models 50 and above)

Remember that you must run the Reference Diskette that came with your computer before ScanMan will work with your system.

Note: If, after running the Scan Test, you still cannot get results, see *Appendix B* for information about contacting Technical Support.

This concludes the ScanMan Plus installation procedure for IBM PC/XT, AT, and PS/2 (models 25 and 30) systems and for IBM PS/2 systems (models 50 and above).

For more detailed information about how to scan, see *Chapter 2*.

To scan from the PaintShow Plus program, see *Chapter 3*.

To scan from the WScan utility that runs under MS Windows, see *Chapter 4*.

To scan from the DosScan utility, see *Chapter 5*.

Notes:

1. The first step in the installation process is to ensure that the system is properly configured. This includes checking the hardware and software requirements, and ensuring that the system is properly installed and configured.

2. The second step is to ensure that the system is properly configured. This includes checking the hardware and software requirements, and ensuring that the system is properly installed and configured.

3. The third step is to ensure that the system is properly configured. This includes checking the hardware and software requirements, and ensuring that the system is properly installed and configured.

4. The fourth step is to ensure that the system is properly configured. This includes checking the hardware and software requirements, and ensuring that the system is properly installed and configured.

5. The fifth step is to ensure that the system is properly configured. This includes checking the hardware and software requirements, and ensuring that the system is properly installed and configured.

6. The sixth step is to ensure that the system is properly configured. This includes checking the hardware and software requirements, and ensuring that the system is properly installed and configured.

7. The seventh step is to ensure that the system is properly configured. This includes checking the hardware and software requirements, and ensuring that the system is properly installed and configured.

8. The eighth step is to ensure that the system is properly configured. This includes checking the hardware and software requirements, and ensuring that the system is properly installed and configured.

9. The ninth step is to ensure that the system is properly configured. This includes checking the hardware and software requirements, and ensuring that the system is properly installed and configured.

10. The tenth step is to ensure that the system is properly configured. This includes checking the hardware and software requirements, and ensuring that the system is properly installed and configured.

The following are the steps to be followed during the installation process:

1. Check the hardware and software requirements.
2. Ensure that the system is properly installed and configured.
3. Check the hardware and software requirements.
4. Ensure that the system is properly installed and configured.
5. Check the hardware and software requirements.
6. Ensure that the system is properly installed and configured.
7. Check the hardware and software requirements.
8. Ensure that the system is properly installed and configured.
9. Check the hardware and software requirements.
10. Ensure that the system is properly installed and configured.

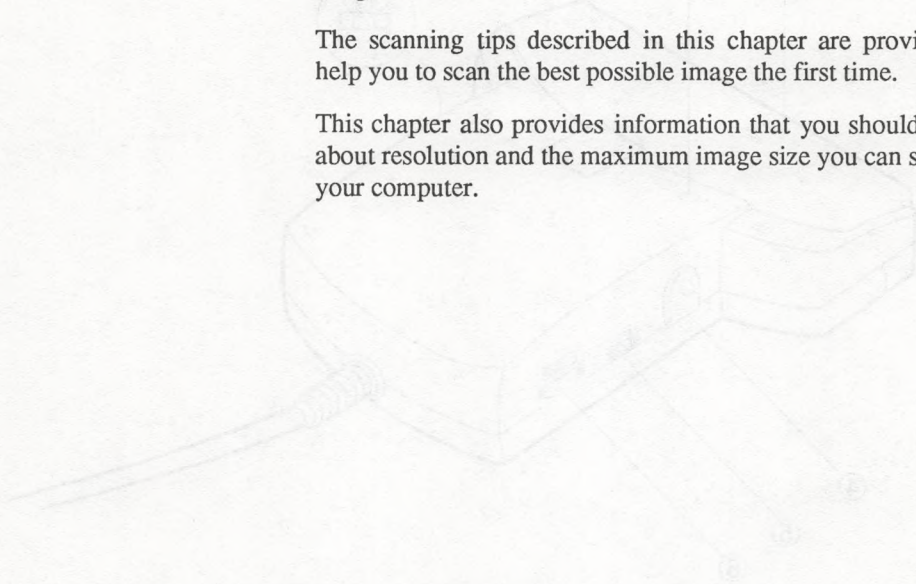
Chapter 2 Scanning Fundamentals

Before using your ScanMan Plus hand-held scanner, you should take some time to become familiar with how it works.

This chapter provides an overview of how to use your ScanMan Plus hand-held scanner properly. You learn the parts of the scanner. You learn what the buttons and controls do and how they affect the way your scanned image looks. You also learn how to hold the scanner and how to scan an image.

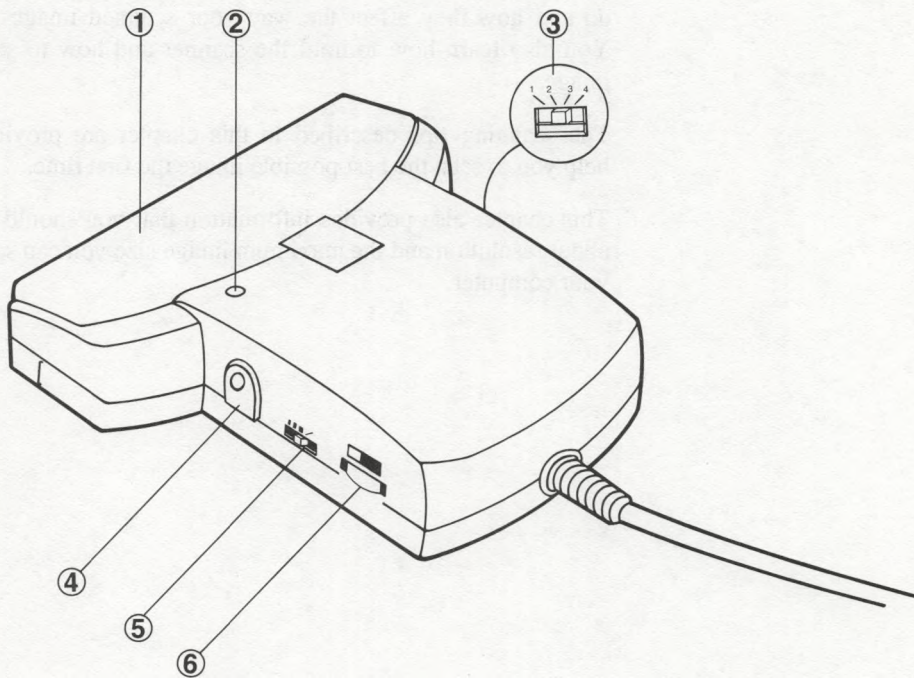
The scanning tips described in this chapter are provided to help you to scan the best possible image the first time.

This chapter also provides information that you should know about resolution and the maximum image size you can scan on your computer.



The ScanMan™ Plus Scanner

This illustration defines the parts of the ScanMan Plus handheld scanner.



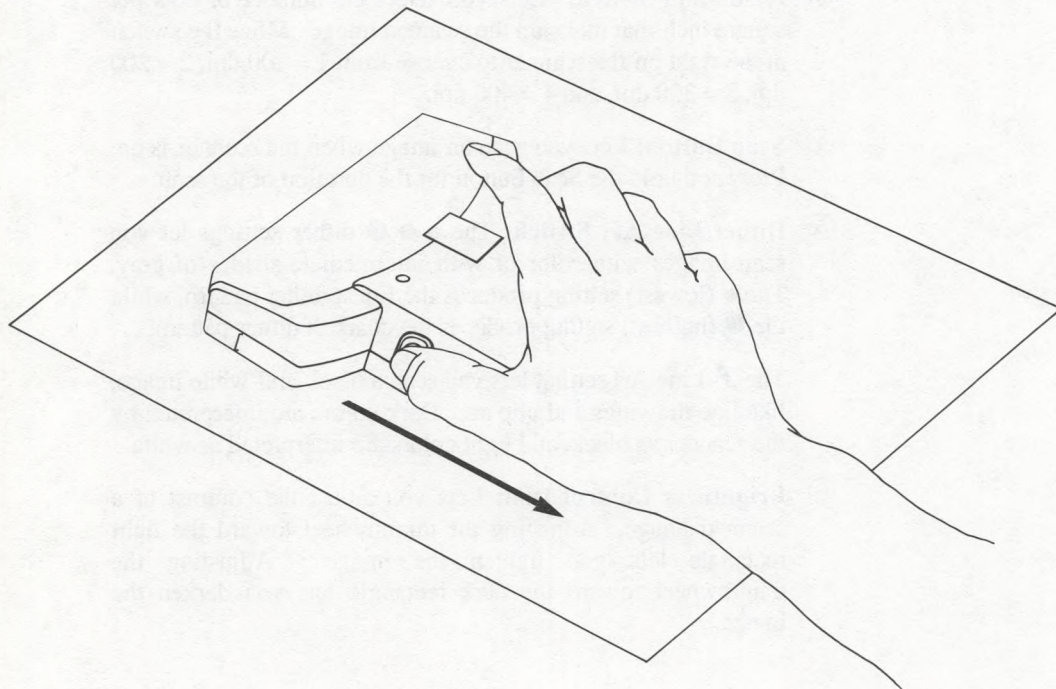
-
- ① **Scanning Window:** Lets you see what you are scanning when the light appears and the scanner is on. Use the guides at the front and sides of the Scanning window to help you position the scanner over the image.
 - ② **Scanning Speed Indicator:** Helps you to control your scanning speed. The indicator light turns on when the scanner is on. It blinks when your scanning speed nears the maximum scanning speed limit. It turns off when you are scanning too fast.
 - ③ **Resolution Switch:** Lets you select the number of dots per square inch that make up the scanned image. Move the switch at the right on the scanner to choose from 1 = 100 dpi, 2 = 200 dpi, 3 = 300 dpi, and 4 = 400 dpi.
 - ④ **Scan Button:** Lets you scan an image when the scanner is on. Press and hold the Scan button for the duration of the scan.
 - ⑤ **Dither/Line Art Switch:** The ● ● ● dither settings let you scan images with color or with intermediate shades of gray. The ● (lowest) setting produces the finest dither pattern, while the ● (highest) setting produces the coarsest dither pattern.

The / Line Art setting lets you scan a black-and-white image, like line drawings and clip art. Dark colors are interpreted by the scanner as black, and light colors are interpreted as white.

- ⑥ **Brightness Control Dial:** Lets you adjust the contrast of a scanned image. Adjusting the thumbwheel toward the light rectangle lets you lighten the image. Adjusting the thumbwheel toward the dark rectangle lets you darken the image.

How to Hold the ScanMan™ Plus Scanner

If you are right handed, hold the scanner so that you can press the Scan button with your thumb, as shown. If you are left handed, hold the scanner so that you can press the Scan button with your middle finger. The arrow shows the direction of scanning motion.



How to Scan

Step 1: Execute a Scan command. Do this from either the PaintShow™ Plus program (see *Chapter 3*), the WScan Utility (see *Chapter 4*), or the DosScan utility (see *Chapter 5*). This turns your scanner which you can tell by the light in the Scanning Window.

Step 2: Position your scanner. (*Appendix D* contains several images that you can scan.) Position the scanner on the page so that the Scanning Window is just above the image. Use the guides at the front and sides of the Scanning Window to position the scanner over the image.

Step 3: Press and hold the Scan Button. Holding your scanner as illustrated, press and hold for the duration of the scan.

Step 4: Scan the image. Slowly and smoothly, roll the scanner down over the image, from top to bottom. The image appears on the screen as you scan.

If you scan too fast, the Scanning Speed Indicator turns off and stays off. If this happens, rescan the image.

Step 5: Complete the scan. Release the Scan button when you have completely scanned the image. If the light in the Scanning Window is still on when you release the Scan button, press any key on the keyboard or any mouse button. This turns your scanner off.

If the light in the Scanning Window turns off while you are scanning, it means that you do not have enough free memory in your computer to scan the whole image.

Step 6: View the scanned image. Scroll the image on the screen or view the whole image to determine the image quality.

Step 7: If necessary, rescan the image. To do so, select the Scan command from the application you are using, and without saving the current image, rescan.

Scanner Controls

This section describes the scanner controls that affect how your scanned image looks. Always check these scanner controls *before* you begin scanning to make sure the scanner is properly configured for the image you are going to scan.

Dither/Line Art Switch

● ● ● Dither Settings

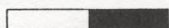
Lets you scan an image with color or intermediate shades of gray. Your scanner interprets color in shades of gray. Your scanner is capable of rendering 32 shades of gray. It renders gray shades by a method called dithering – a way of arranging pixels in particular patterns to suggest gray shades.

The ● ● ● dither settings let you select how the scanner renders an image with color or shades of gray. The ● (lowest) produces the finest dither pattern, while ● (highest) produces the coarsest dither pattern. The finer the dither pattern, the clearer the image appears. Experiment to get the best results.

／ Line Art Setting

The ／ lets you scan a black-and-white image, like text, line art, or clip art. All dark areas appear black, and all light areas appear white. This setting provides the highest contrast with clear detail.

Brightness Control Dial

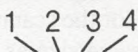


Lets you determine the brightness or darkness of the scanned image. Use the Brightness Control dial to make the image as clear as possible, or to minimize problems with the original like unwanted shading or splotches.

Rotate the thumbwheel toward the light rectangle to get a lighter image. Rotate the thumbwheel toward the dark rectangle to get a darker image. The lighter the image the more detail is visible. The darker the image, the less detail is visible.

If you plan to scale down a large image, scan at a relatively bright setting. As you reduce the image, detail is compressed and the image appears darker.

Resolution Switch



Lets you select the number of dots per square inch for the image you scan. The higher the resolution setting, the clearer the image appears. To select a resolution setting, move the switch to the desired number: 1 = 100 dpi, 2 = 200 dpi, 3 = 300 dpi, 4 = 400 dpi. See *page 36* for more information about the relationship between resolution settings and the size of your scanned image.

Scanning Tips

What to Scan

Your choice of images can include cartoons, photographs, line art, logos, drawings, graphs, charts, diagrams, text, etc. You can scan from fliers, magazines, books, the newspaper, catalogs — almost anything that lays flat on your desktop.

You can scan color pictures or pictures with shades of gray. Or, you can scan black-and-white images, like text, line art, or clip art. The original image should have reasonably good contrast.

The image must fit within the maximum scanning dimensions — 4.10 by 14 inches. (See *page 34* for more information about the maximum image length you can scan on your computer.)

If your original is too big, reduce it on a photocopy machine, then scan. If the original is too large for the scanner to scan in one pass, but the image must be the same size as the original, you can scan the original in several passes from the PaintShow™ Plus Auxiliary screen. (See *Chapter 3, pages 51 to 54.*)

You can scan an image with a matte (non-glossy) or semi-glossy surface. Scanning an image with a glossy surface may generate reflections that show up as splotches. To correct this, use the Brightness Control dial or photocopy the original, then scan the photocopy.

Scanning Speed

Experiment to determine the best scanning speed. Generally, You should scan at an even rate of about an 1/2 inch to 2 inches per second. Scan more slowly for images with shades of gray and when using higher resolutions. If you scan too fast, the scanner cannot receive all of the incoming information, and the image is distorted or squeezed vertically. The Scanning Speed Indicator at the top of the scanner turns off when you scan too fast. If this happens, re-scan the image.

Scanning Motion

Scan in a smooth, even motion. Jerky movements or pauses while you are scanning creates a jagged or wavy image. Do not press too hard on the scanner head while scanning, and avoid moving your mouse when you scan.

Scanning Difficult-to-Hold Images

When scanning a small, difficult-to-hold image, like a newspaper clipping or a wallet-size photograph, place it under a transparent sheet, or tape it down, then scan.

Scanning Straight

Use a ruler or the edge of a book to help you scan in a straight line. This helps you avoid a slanted image, "stairstepping" and jagged lines.

Scanning Colors

The color of the Scanning Window may cause the scanner to be insensitive to certain colors or hues. To compensate for this, adjust the Brightness Control dial to a darker setting or make a photocopy of the original image, then scan.

Print Often

While you're learning to use the scanner, print often. The screen image gives you a good idea of how the scanned image will look, but the final test is how the image looks on paper.

Resolution

Resolution is the number of dots per inch that determines the degree of detail in a scanned image.

Scanning Resolution

The scanning resolution determines how the image is digitized and displayed on the screen initially. The ScanMan Plus hand-held scanner scans at 100 dpi, 200 dpi, 300 dpi, and 400 dpi.

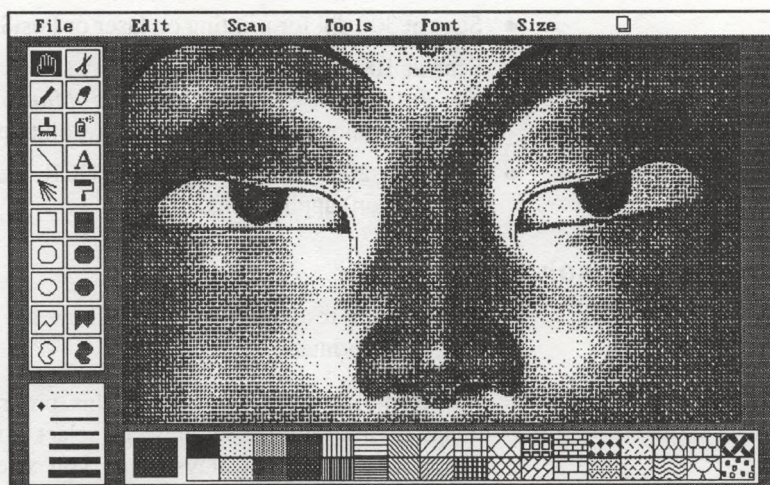
Select the scanning resolution by a combination of the scanner and software settings. Set the scanner resolution from the Resolution switch at the right on the scanner unit. In the PaintShow Plus program, set the software resolution from the **SETUP SCAN** dialog box which displays when you select **Setup Scan** from the **Scan** menu. (The default software resolution is 200 dpi, which you confirm or change when you run the ScanMate software installation program. See *Chapter 1, Installation*.)

Always check to see that both the scanner and the software resolution settings match before you scan. If they conflict, the scanner resolution overrides the software resolution which significantly distorts the scanned image.

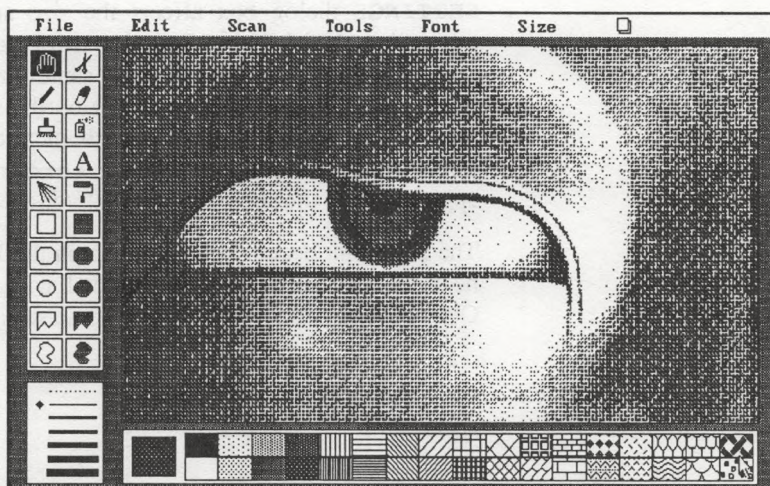
Scanning resolution determines how large the image appears on the screen. Increase the scanning resolution to increase the size of the image on the screen. Compare the image in *Example 1* that was scanned at 200 dpi with the image in *Example 2* that was scanned at 400 dpi. Notice how only a fraction of the image is visible on the drawing board in *Example 2*. When you double the scanning resolution in each dimension, height and width, the surface area is multiplied by four.

Increasing the scanning resolution increases the size of the image file, which reduces the size of the area you can scan. Reducing the scanning resolution reduces the size of the image file which increases the size of the area you can scan.

Example 1: Image Scanned at 200 dpi



Example 2: Image Scanned at 400 dpi



Scanning Resolution Tips

- Scan at 200 dpi for general scanning.
- Scan at 300 dpi for printing on laser or PostScript printers.
- Scan at 100 dpi for SlideShow utility screen presentations, see the *PaintShow™ Plus 2.2 User's Manual*. The scanner resolution should match the screen resolution.
- Scan at 200 to 400 dpi for OCR (Optical Character Recognition) applications.

Working Resolution

The working resolution determines how the image is saved to disk and is printed.

For example, in the PaintShow Plus program, you save an image to disk with the settings you select in the **SETUP SCAN** dialog box (which displays when you select **Setup Scan** from the **Scan** menu) and the **PICTURE SETTINGS** dialog box (which displays when you select **Picture Settings** from the **File** menu).

Changing the **match DPI** setting in the **PICTURE SETTINGS** dialog box affects the size and quality of the printed image. Matching the dpi to **scanner** lets you print a scan image at approximately the same size as the original image, though it will appear larger on the screen. Matching the dpi to **printer** matches each picture pixel with each printer pixel. Matching the dpi to **screen** lets you print at approximately the same size as what you see on the screen.

The best print occurs when you match the DPI to **printer**, because each image dot is matched with each printer dot. Other **match DPI** settings cause some scaling of the image.

Image Size and Memory Required

The maximum scanning width is 4.10 inches. The default width is the width of the Scanning Window. The default scanning length is 6 inches at 200 dpi.

The maximum scanning length that you can specify depends on several factors:

- The specified scan width.
- The video mode.
- The scanner resolution.
- The amount of available RAM. (Available RAM is memory not used by DOS, drivers, resident programs, and the current application.)

For example when you run the PaintShow Plus program with a computer with 640K RAM, the maximum memory available for images is about 276K. This assumes a minimum configuration with a Logitech mouse driver, the ScanMan driver and CATCH loaded. If you are loading other resident software, this could be substantially less.

For example, a system with 50K of resident software in addition to the Logitech Mouse Driver, the ScanMan Driver and CATCH could produce a picture with a maximum length of 44.7 inches at 100 dpi, 11.2 inches at 200 dpi, and 4.9 inches at 300 dpi, or 2.8 inches at 400 dpi.

RAM requirements for an image can be figured as follows:

$$\frac{\text{Length X Width X DPI}^2}{8000} = \text{Kbytes Required}$$

Notes:

Chapter 3

Scan from PaintShow Plus

The PaintShow Plus program provides the perfect environment for scanning, editing and enhancing your scanned image. From the PaintShow Plus program, you can magnify, color, reverse, trace, rotate, flip, copy, scale, cut, copy, paste, and add text to your scanned image. You can scan an image with the settings you select in the **SETUP SCAN** dialog box. You save the scanned image to disk with the settings you select in the **PICTURE SETTINGS** dialog box. You print the scanned image with the settings you select in the **SETUP PRINT** dialog box.

The PaintShow Plus program lets you save image files in TIFF (tagged image file format). The PaintShow Plus file conversion utilities let you convert your image files to PCX (PC Paintbrush) file format. You can also convert PCX and MAC (MAC Paint) formatted files to TIFF file format. This lets you easily import and export your scanned image files.

The SlideShow utility lets you sequentially display your enhanced images in an on-screen presentation.

This chapter describes *only* the scanning related features of the PaintShow Plus program – how to scan an image with the ScanMan Plus hand-held scanner from the main screen and from the Auxiliary screen. For a complete description of other PaintShow Plus commands and features, see the *PaintShow Plus 2.2 User's Manual*.

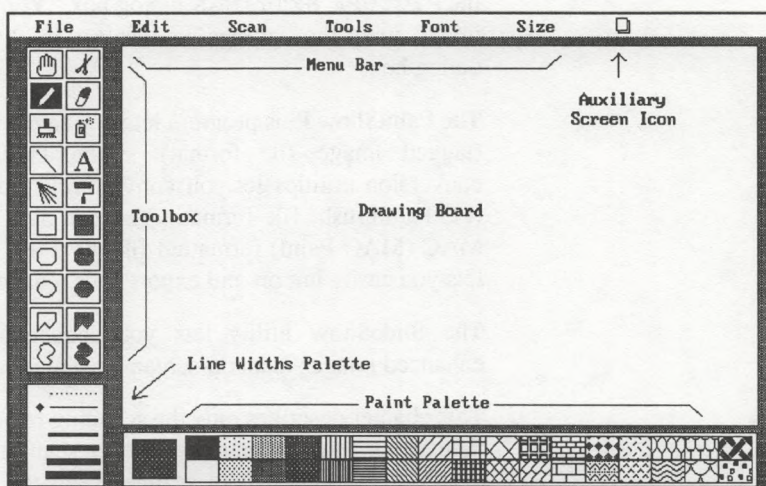
Note: We assume that you have installed the PaintShow Plus software to run on your computer as described in the *PaintShow Plus 2.2 User's Manual*. We also assume that you have installed and configured the ScanMate™ software and ScanMan interface board, and connected the ScanMan Plus hand-held Scanner as described in *Chapter 1* of this manual. If you have not, please do so before you proceed.

3.1 Load PaintShow Plus

From the drive and directory where you installed the PaintShow Plus software, type:


PAINT

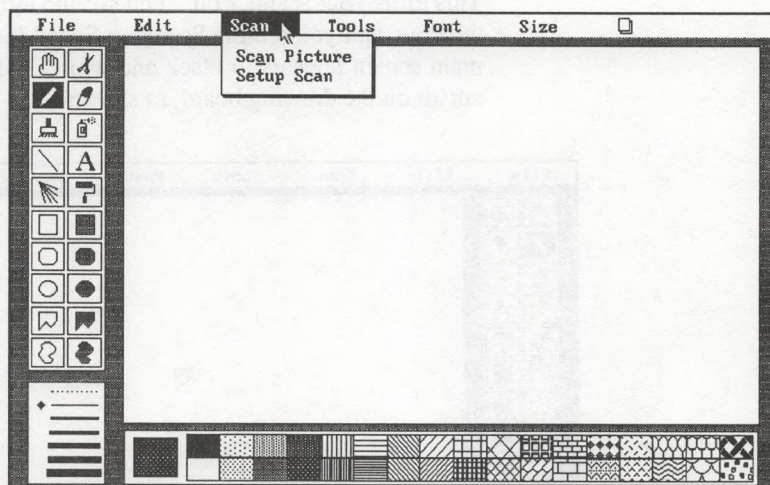
This displays the main screen, as defined below. See the *PaintShow™ Plus 2.2 User's Manual* for more information about how to load the PaintShow Plus program and about parameters you can enter at the DOS command line.



3.2 Scan From the Main Screen

3.2.1 The Scan Menu

Point to **Scan**, then press and hold . This causes the pull-down menu to appear, as shown.



If **Scan** is shaded, it means that the PaintShow Plus program does not detect the presence of your scanner, and you cannot scan. Check to see that:

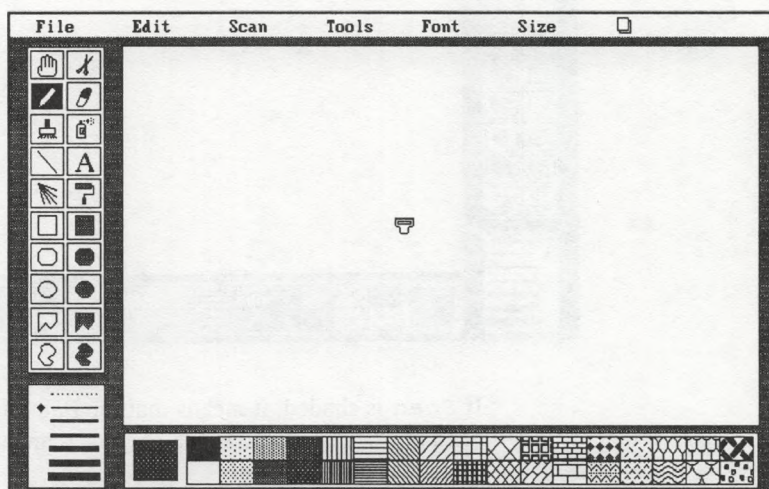
- You have properly installed and configured the ScanMate™ software to run on your computer by running the SCANINST installation program.
- The scanner driver is included in your CONFIG.SYS file, and that it contains the correct information.
- You have restarted your computer after you quit the installation program.
- The ScanMan interface board is properly plugged into an expansion slot in your computer.

If you still cannot scan, see *Appendix B* for information about contacting Technical Support.

3.2.1.1 Scan Picture

Scan Picture lets you scan an image with the ScanMan™ Plus hand-held scanner onto the main screen drawing board. Open the **Scan** menu and release ☐☐☐ on **Scan Picture**, or press **Alt-A**.

This turns your scanner on. You see the light in the Scanning window, and you see the Scanning Speed Indicator light. The main screen appears in black and white, and you see the scan cursor on the drawing board, as shown.

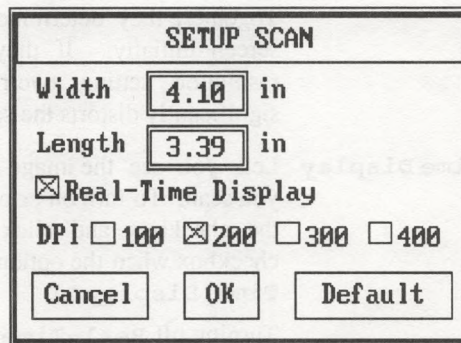


Position the scanner over the image, press and hold the Scan button, and scan as described on *page 31* of this manual. (*Appendix D* contains several images you can scan.) Press any mouse button or keyboard key to turn the scanner off.

To rescan an image, select **Scan Picture** again from the **Scan** menu. The **SAVE BEFORE ERASE** dialog box appears asking you if you want to save the current image before you rescan. Click ☐☐☐ on **No**. This turns your scanner on, and you can rescan the image.

3.2.1.2 Setup Scan

Setup Scan lets you specify software settings before you scan an image. Open the **Scan** menu and release **[F4]** on **Setup Scan**. This displays the **SETUP SCAN** dialog box, as shown.



SETUP SCAN

Width in

Length in

☒ Real-Time Display

DPI ☐ 100 ☒ 200 ☐ 300 ☐ 400

Width Lets you set the scan width. The maximum scan width is 4.10 inches. To set a narrower width, click **[F4]** on the **Width** field to highlight it, then press **[Del]** or **[Backspace]** to clear the current setting. Type in a new setting and press **[Enter]**.

Length Lets you set the scan length. The scan length is dependent on the available RAM in your computer. To set a new scan length, click **[F4]** on the **Length** field to highlight it, then press **[Del]** or **[Backspace]** to clear the current setting. Type in a new setting and press **[Enter]**.

☛ If the dimensions of the image are too large for the amount of available RAM in your computer, you hear a beep, and a **SIZE TOO BIG** box appears on the screen. Click **[F4]** on **Retry** to go back and set smaller scan dimensions in the **SETUP SCAN** dialog box. Or, click **[F4]** on **Cancel** to clear the box from the screen.

DPI Lets you set the software scanning resolution in dots per inch (dpi). You can select from 100 to 400 dpi. The default resolution setting is 200 dpi. Click ☒ ☐ ☐ on a DPI option box to select it. An X appears in the checkbox of the option you select.

The resolution that you set here in the **SETUP SCAN** dialog box *must match* the scanner Resolution switch setting. Together, they determine how your picture appears on the screen initially. If they conflict, the hardware (scanner) resolution setting overrides the software setting which significantly distorts the scanned image.

Real-Time Display Lets you see the image on the main screen drawing board as you scan. To turn on or off **Real-Time Display**, point to the checkbox and click ☒ ☐ ☐. An X appears in the checkbox when the option is on. The default setting is **Real-Time Display** on.

Turning off **Real-Time Display** lets you see the scanned image after you press any keyboard key or mouse button to turn your scanner off. This is useful if you have a computer configuration that interferes with simultaneous scanning and displaying, or if you have applications that run in the background.

☞ To scan in real-time display, you must have configured the ScanMate software and the ScanMan interface board with an interrupt when you ran the SCANINST installation program that is described in *Chapter 1*. If you selected the "No Interrupt" option, you *cannot* scan in real-time display from the main screen. Also, you *cannot* scan from the Auxiliary screen, and the **Scan** command is shaded.

Cancel Lets you clear the **SETUP SCAN** dialog box from the screen without changing the current settings when you click ☒ ☐ ☐ on **Cancel**, or press **[Esc]**.

OK Lets you execute the current dialog box settings when you click ☒ ☐ ☐ on the **OK**, or press **[Enter]**.

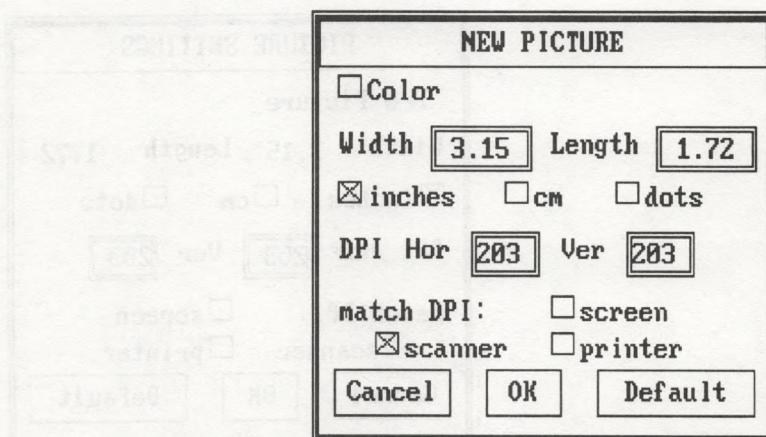
Default Sets these default settings: Width:4.10 In; Length:6 In; DPI:200; Real-Time Display-on.

3.2.2 Match Scanner Resolution Options

3.2.2.1 New Picture Dialog Box

The **match DPI: scanner** option in the **NEW PICTURE** dialog box, as shown, lets you match the resolution of a new picture with the current scanner's resolution before you scan.

This option only appears in the dialog box if you have the ScanMan scanner. Click ☒ on the **scanner** option box to select it. An **X** appears in the option box.



NEW PICTURE

☐ Color

Width Length

☒ inches ☐ cm ☐ dots

DPI Hor Ver

match DPI: ☐ screen ☒ scanner

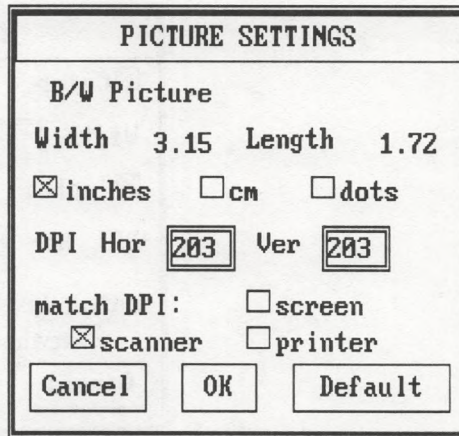
Matching the DPI to **scanner** lets you print a scanned image at approximately the same size as the original image, though it appears larger on the screen. You can also use **match DPI: scanner** when you want to scan an image into an area of a new picture, and you want the resolution of the new picture to match the resolution of the scanner.

- Changing the scanner resolution in the **SETUP SCAN** dialog box *after* you set the scanner resolution from the **NEW PICTURE** dialog box turns off **match DPI: scanner**. Always select the scanning resolution in the **SETUP SCAN** dialog box *first*, then match the scanner resolution from the **NEW PICTURE** dialog box.

3.2.2.2 Picture Settings Dialog Box

The **match DPI: scanner** option in the **PICTURE SETTINGS** dialog box, as shown, lets you set the resolution of the current picture to match the scanner's resolution. You save a picture to disk with the settings you set in the **PICTURE SETTINGS** dialog box.

This option only appears in the dialog box if you have the ScanMan scanner. Click ☒ on the **scanner** option box to select it. An **X** appears in the option box.



PICTURE SETTINGS

B/W Picture

Width 3.15 Length 1.72

☒ inches ☐ cm ☐ dots

DPI Hor 203 Ver 203

match DPI: ☒ scanner ☐ printer

Cancel OK Default



Matching the resolution of the current picture with the scanner resolution lets you print a scanned image at approximately the same size as the original image, though it may appear larger on the screen.

- ☛ Changing the scanner resolution in the **SETUP SCAN** dialog box *after* you match the scanner resolution from the **PICTURE SETTINGS** dialog box turns off **match DPI: scanner**. Always select the scanning resolution in the **SETUP SCAN** dialog box *first*, then match the scanner resolution from the **PICTURE SETTINGS** dialog box.

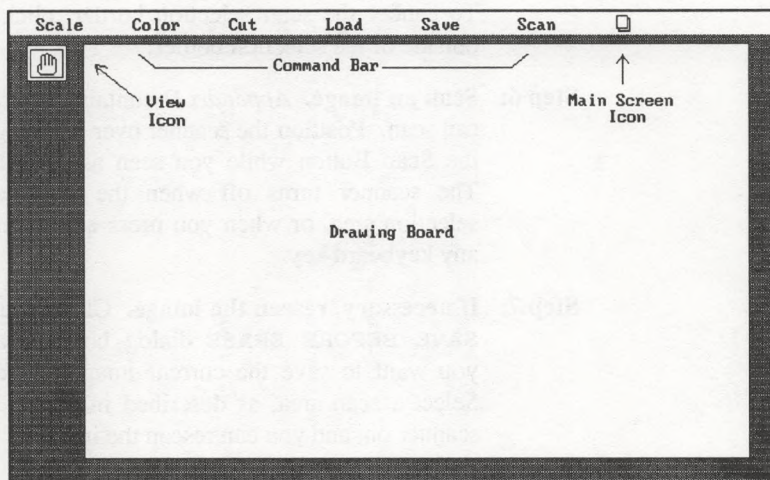
3.3 Scan from the Auxiliary Screen

The Auxiliary screen, as shown, lets you view the whole image, size and scale the image, define an area of a black and white image to color, crop, load an image into a defined area, and save a defined area of a picture. From the Auxiliary screen you can also scan an image into a defined area that you select on the current picture. This lets you scan an image in one pass or in multiple passes, as described on pages 51 to 54.

This section describes how to scan an image from the Auxiliary screen. Only the scan command is described here. For a detailed description of the other Auxiliary screen commands, see the *PaintShow Plus 2.2 User's Manual*.


To go to the Auxiliary screen, click  on the Auxiliary screen icon on the main screen, or click  anywhere in the menu bar area of the main screen. You can also go to the Auxiliary screen by selecting **Show Picture** from the **Tools** menu.

- ☞ If you did not configure the ScanMate software and the ScanMate interface board with an IRQ jumper setting, you *cannot* scan from the Auxiliary screen, and the **Scan** command is shaded.






3.3.1 Scan



Scan lets you scan into a defined area of the current picture. You can load a picture file and scan into it, or you can scan into a blank picture. To do so, follow the steps below.


Step 1: Select the scanning resolution. Open the **Scan** menu on the main screen and release  on **Setup Scan**. From the **SETUP SCAN** dialog box, select the scanning resolution.

Step 2: Match the current picture resolution with the scanner resolution. Open the **File** menu and select **Picture Settings**. From the **PICTURE SETTINGS** dialog box, select **match DPI: scanner**.



Step 3: Go to the Auxiliary screen. Click  on the Auxiliary screen icon or click  anywhere on the main screen menu bar area.

Step 4: Select the Scan command. Point to **Scan** and click .

Step 5: Select a scan area. Position the cursor on the drawing board. Press and hold  while you drag the mouse down diagonally to the right to expand the selection border. Release  to secure the selection border. This turns your scanner on, and you should see the light in the Scanning window.

To cancel the scan selection border, click  inside or outside of the selection border.

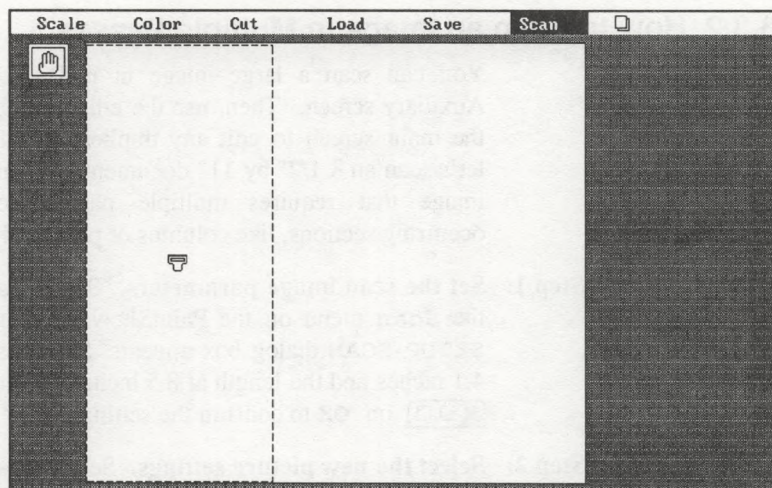
Step 6: Scan an image. *Appendix D* contains several images that you can scan. Position the scanner over the image. Press and hold the Scan Button while you scan as described in *Chapter 2*. The scanner turns off when the scanned image fills the selection area, or when you press any mouse button or press any keyboard key.

Step 7: If necessary, rescan the image. Click  on **Scan**. The **SAVE BEFORE ERASE** dialog box appears asking you if you want to save the current image. Click  on **No**. Select a scan area, as described in *Step 5*. This turns your scanner on, and you can rescan the image.

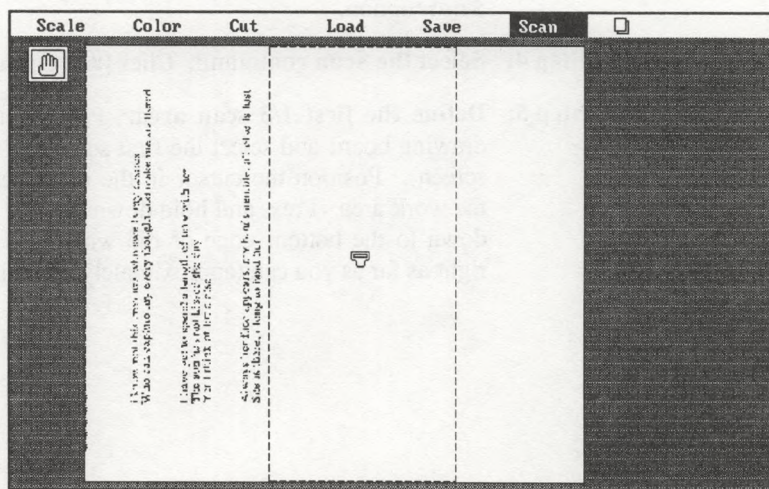
3.3.2 How to Scan an Image in Multiple Passes

You can scan a large image in multiple passes from the Auxiliary screen. Then, use the edit commands and tools on the main screen to edit any duplication. For this example, let's scan an 8 1/2" by 11" document. When scanning a large image that requires multiple passes, scan in naturally occurring sections, like columns or paragraphs.

- Step 1: Set the scan image parameters.** Select **Setup Scan** from the **Scan** menu on the PaintShow Plus main screen. The **SETUP SCAN** dialog box appears. Set the scanning width at 4.1 inches and the length at 8.5 inches. Select 100 dpi. Click ☒ ☐ ☐ on **OK** to confirm the settings.
- Step 2: Select the new picture settings.** Select **New Picture** from the **File** menu. The **NEW PICTURE** dialog box appears. Set the **DPI** to 100. Set the picture width at 11 inches, and the length at 8.5 inches. Click ☒ ☐ ☐ on the **Color** checkbox to turn the color option off. Click ☒ ☐ ☐ on **OK** to confirm the settings.
- Step 3: Go to the Auxiliary screen.** Click ☐ ☐ ☒ anywhere on the menu bar or click ☒ ☐ ☐ on the Auxiliary screen icon. This takes you to the Auxiliary screen. Click ☒ ☐ ☐ on the **Scan** option.
- Step 4: Select the Scan command.** Click ☒ ☐ ☐ on **Scan**.
- Step 5: Define the first 1/3 scan area.** Position the cursor on the drawing board and select the first scan area (first 1/3rd of the screen). Position the cursor in the upper left hand corner of the work area. Press and hold down ☒ ☐ ☐. Drag the cursor down to the bottom edge of the work area, and over to the right as far as you can (approximately one third of the screen).



Step 6: Scan the first 1/3 of the document. First, rotate the document to the left, horizontally on your desk. Scan from top to bottom across the document, as shown.






Step 7: Define the second 1/3 scan area. On the Auxiliary Screen, select the second scan area. Position the cursor next to the first scan frame which now contains the scanned image of the top most 1/3 of your document. Drag the cursor down to the bottom edge of the work area, and over as far to the right as you can.


Step 8: Scan the second 1/3 of the document. Position the ScanMan scanner at the top second third of the 8 1/2- by 11-inch document. Slowly move the ScanMan scanner from top to bottom across the second third of the document.

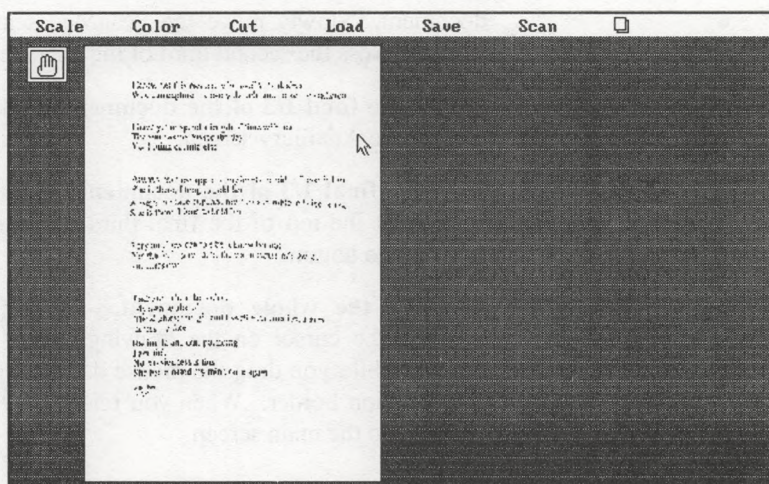
Step 9: Define the final 1/3 of the document. Select the final scan area on the Auxiliary screen.






Step 10 Scan the final 1/3 of the document. Position the ScanMan scanner at the top of the final third of your document. Scan from top to bottom.

Step 11: Cut out the whole document. Click  on Cut. Position the cursor on the drawing board. Press and hold  while you drag the mouse down diagonally to expand the selection border. When you release the , you are returned to the main screen.

Step 12: Select **Rotate Picture** from the **File** menu. This rotates the image 90 degree counterclockwise on the drawing board.

Step 13: Go back to the **Auxiliary** screen to view the document. Click  on the Auxiliary screen icon. The document appears on the drawing board, as shown.



Select **Magnify** from the **Tools** menu on the main screen to clean up any repeated images in the document. Or, you can double click  on the Pencil icon in the tool box to magnify an area of the document that you click  on. Press  to add pixels. Press  to erase pixels. Click  on the view box at the top left corner of the screen to return to the normal view mode.

Chapter 4

Scan from WScan

This chapter tells you how to scan an image from the WScan utility. It also includes a reference section to help you perform commands in the WScan utility.

The WScan utility runs under the Microsoft®Windows operating environment, version 2.03 and above. (If you have an earlier version of Windows, contact Microsoft for an upgrade.)

From the WScan window, you can scan an image in delayed or real-time display. Delayed display lets you see the scanned image on screen after you terminate scanning. Real-time display lets you see your scanned image on screen as you scan.

You can save all or a selected area of your scanned image to disk in TIFF (tagged image file format), PCX (PC Paintbrush), or MSP (Microsoft Paint) file format. You can load *black-and-white* image files from other applications that you save in TIFF, PCX, or MSP file format.

You can also copy all or a selected area of your scanned image to the Windows Clipboard. From the Clipboard, you can paste the image in other applications that run under Windows.

Note: To use the WScan utility, you must install the ScanMate software and the ScanMan interface board, and connect you scanner as described in *Chapter 1*. You must also have a compatible mouse driver and Microsoft Windows, version 2.03 and above.

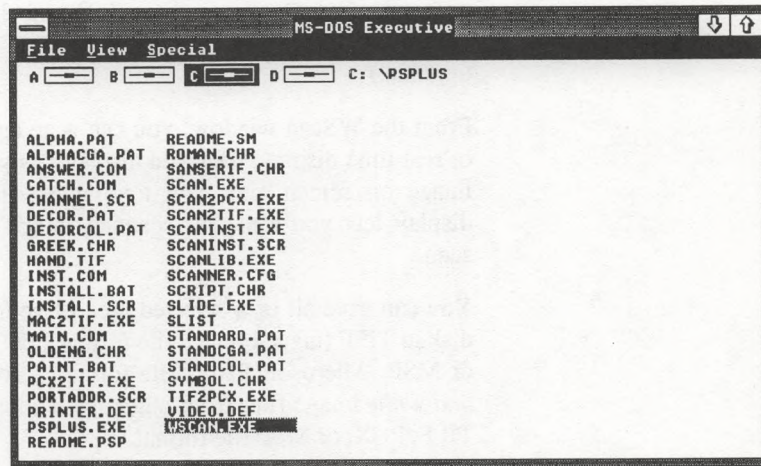
4.1 How to Load WScan

If you include Windows in your PATH statement, you can load Windows from any drive and directory.

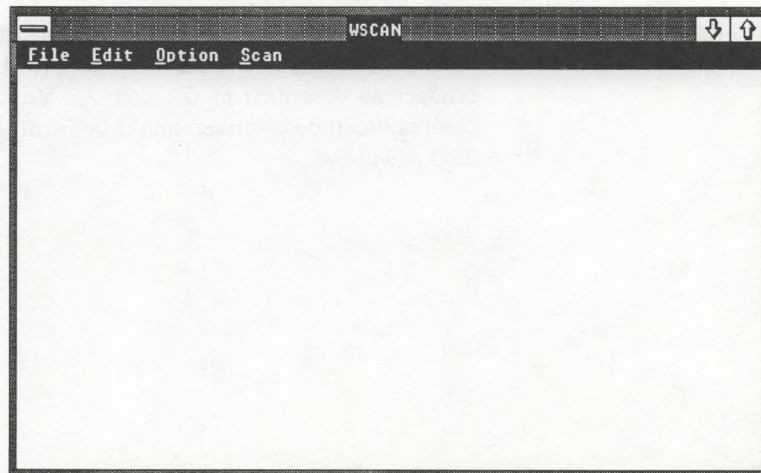
Step 1: Load Microsoft Windows. From the drive and directory where you keep the ScanMate software, type:

WIN

This loads the MS-DOS Executive window, as shown.



Step 2: Load the WScan window. Double click on WSCAN.EXE. This displays the WScan window, as shown.



4.2 How to Scan from WScan

Follow these steps to scan from the **WScan** window.

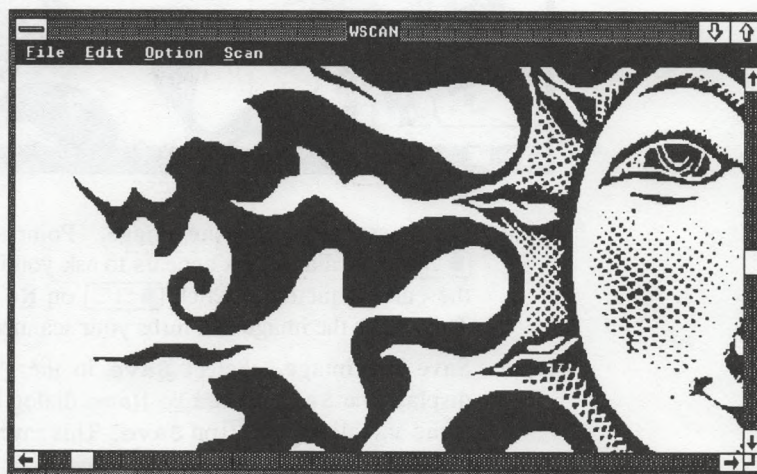
- Step 1: Set the scan options.** Open the Option menu and select Scan Setup. The Scan Options dialog box appears.

The Scan Options dialog box lets you set the scan size, resolution in dpi, and choose whether you want to scan in real-time display. See *pages 75 and 76* for a detailed description of the Scan Options dialog box.

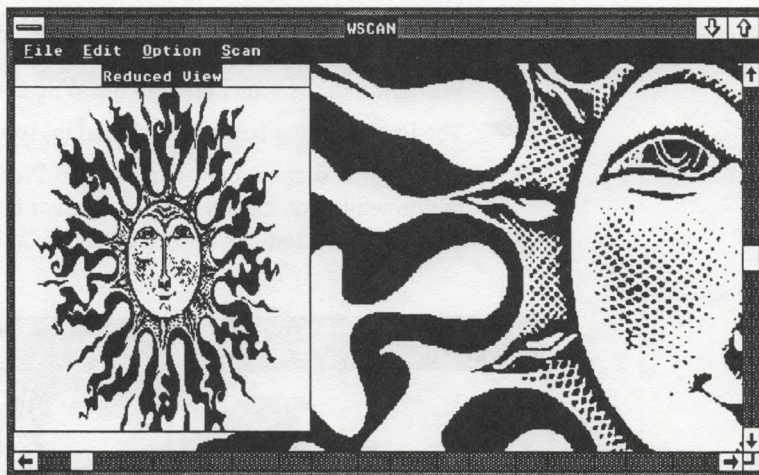
- Step 2: Scan an image.** Point to Scan and click ☒ ☐ ☐ . This turns your scanner on. You should see the light in the Scanning Window and the scan cursor in the WScan window.

☞ The image shown below is included in *Appendix D*.

Position the scanner over the image. Press and hold the Scan button while you slowly roll the scanner down over the image, from top to bottom, as illustrated and described in *Chapter 2*.



Step 3: View the whole image. Click ☐ ☐ ☐ on the arrows in the horizontal and vertical scroll bars to scroll the image in the window. Or, point to the elevator in the scroll bar and press and hold ☐ ☐ ☐ while you drag the mouse to scroll the image. From your keyboard, you can press **PgUp** to scroll up, **PgDn** to scroll down, **Ctrl-PgUp** to scroll to the right, and **Ctrl-PgDn** to scroll to the left. To view the whole image, open the **Option** menu and select **Reduce View**. You see the whole image in the Reduced View window. See page 79.



- Step 4: If necessary, rescan the image.** Point to **S**can and click ☐ ☐ ☐. A dialog box appears to ask you if you want to save the current picture. Click ☐ ☐ ☐ on **N**o or press **Alt-N**. This clears the image and turns your scanner on.
- Step 5: Save the image.** Select **S**ave in the **F**ile menu. This displays the **Save as File Name** dialog box. Type in a file name and click ☐ ☐ ☐ on **S**ave. This saves the image to disk in the current path. See pages 65 and 66.
- Step 6: Print the image.** Select **P**rint in the **F**ile menu. This displays the **Print Picture** dialog box. Set the print position (margins) and size. Then, click ☐ ☐ ☐ on **P**rint or press **Enter**. See pages 68 and 69.


4.3 How WScan Works

This section is a reference guide to the WScan utility. Command-by-command it tells you how the utility operates – the WScan window, the keyboard and mouse commands, the menus, and dialog boxes.

4.3.1 Mouse and Keyboard Actions

4.3.2.1 Mouse Actions

Use a 2-button or 3-button mouse to perform WScan operations. For a description of mouse conventions and terms used in this manual, see *page 4*.

Before you can perform an operation in the WScan utility you must select it. To do so, point to it with the mouse cursor and click . This highlights or selects the item.

Use your mouse to size, move, and close the WScan window. Use your mouse to open menus and select menu options. Use your mouse to select dialog box options. And, use your mouse to scroll the image on the screen and to select an area of the image to save, print, or copy.

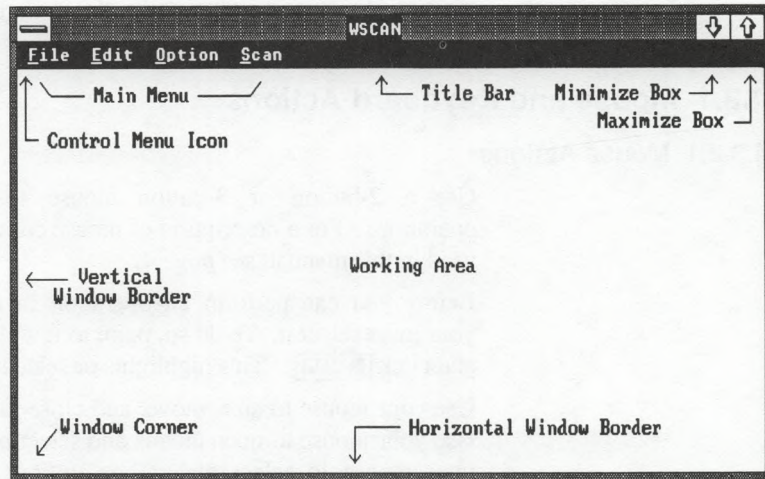
4.3.2.2 Keyboard Actions

From your keyboard, you can move, size, and close the WScan window. From your keyboard, you can execute a drop-down menu option or a dialog box option with an underlined letter. To do this, press **[Alt]** and the keyboard key that corresponds with the underlined letter in the option. For instance, to select save in the **F**ile menu, press **[Alt]-S**.


Use your keyboard to scroll the image on the screen. Press **[PgUp]** to scroll up; press **[PgDn]** to scroll down; press **[Ctrl]-[PgUp]** to scroll to the right; and press **[Ctrl]-[PgDn]** to scroll to the left.

Use your keyboard to select an area of an image to save, copy, or print. And, use your keyboard to interface with a dialog box. Press **[← Backspace]** or **[Del]** lets you clear a dialog box text field; press **[→]** to move the cursor between dialog box fields; press **[←]**, **[→]**, **[↑]**, and **[↓]** to move the cursor within a dialog box field or in the WScan window.


4.3.2 Exploring The WScan Window




Control Menu Icon Lets you open the Control menu. The Control menu lets you restore, size, move and close the WScan window. The Control menu icon is common to all Windows applications. See your Windows user's manual for a description of the Control Menu commands.



Title Bar Displays the name of the application. The title bar also lets you move the WScan window with your mouse. To do so, point anywhere in the title bar area, then press and hold  while you drag the mouse to move the window.

Main Menu Displays the names of the available command menus in the WScan utility.



Minimize Box Lets you reduce the WScan window to an icon with your mouse. Point to the up arrow and click .



Maximize Box Lets you enlarge a window to its largest position with your mouse. Point to the down arrow and click .

Vertical

Window Border Both vertical window borders let you make the window wider or narrower with your mouse. A two-headed arrow appears when you position the mouse on a vertical window border. Press and hold  while you drag the mouse in or out. Release  to secure the window size.

Horizontal

Window Border Each horizontal window border lets you make the window longer or shorter with your mouse. A two-headed arrow appears when you position the mouse on the border. Press and hold  while you drag the mouse up or down. Release  to secure the window size.







Window Corner Each window corner lets you make the window wider or longer with your mouse. A two-headed arrow appears when you position the mouse on the window corner. Press and hold  while you drag your mouse diagonally. Release  to secure the window size.



Working Area Displays the contents of the image file.

- ☛ The Reduced View window may appear in the working area when you first load the WScan window. The Reduced View Window lets you view the whole image. You can remove the Reduced View window by opening the Option menu and selecting Reduce View. Then open the Option menu again and select Save Configuration. This lets you load the WScan window without the Reduced View window. See pages 79 and 80.

4.3.3 The Main Menu

The main menu displays the available menus and commands in the WScan utility: File, Edit, Option, and Scan.

To select a menu, point to it and click . Or, from the keyboard, press  and the key that corresponds with the underlined letter. For instance, to select the File menu, press -. The File drop-down menu appears with the available options. To remove a drop-down menu, click  outside the menu box, or press .




To select an option in a drop-down menu, point to it to highlight it, and click . Or, from your keyboard, type the key that corresponds to the underlined letter in an option. For instance to select Print from the opened File menu, press .

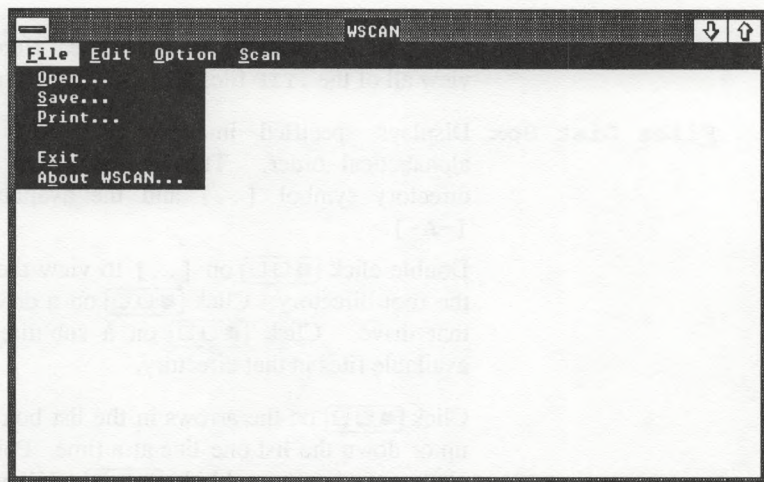
A shaded menu option means that you can not select it. For instance, the Save and Print options in the File menu are shaded until you load or scan an image in the working area.

A dialog box appears when a select menu option needs information from you to carry out the command.

4.3.3.1 File Menu

The File menu lets you open , save, or print a file. From the File menu, you can also close the WScan window and view the software copyright information.

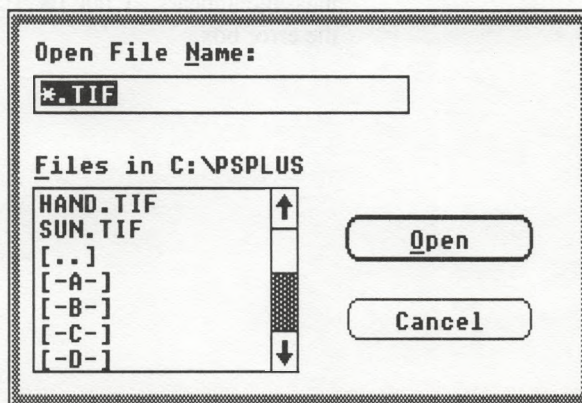
To open the File menu, click  on File. From your keyboard, press -. This displays the available menu options, as shown on the next page.



4.3.3.1.1 Open

Lets you load an existing file from any available drive and path to display on the WScan window.

Click ☐ ☐ ☐ on **F**ile to open the menu, then click ☐ ☐ ☐ on **O**pen. Or, from the keyboard, press **Alt-F**, then press **O**. This displays the **Open File Name** dialog box, as shown. The dialog box fields are described on the next page.



Open File Name Lets you specify an image file name. Here, *.TIF lets you view all of the .TIF files in the current path.

Files List Box Displays specified image files in the current path in alphabetical order. The list box also displays the root directory symbol [...] and the available drive symbols [-A-].

Double click ☐ ☐ ☐ on [...] to view the sub-directories in the root directory. Click ☐ ☐ ☐ on a drive symbol to go to that drive. Click ☐ ☐ ☐ on a sub-directory to view the available files in that directory.

Click ☐ ☐ ☐ on the arrows in the list box scroll bar to move up or down the list one line at a time. Point to the scroll bar elevator and press and hold ☐ ☐ ☐ while you drag the mouse to scroll. Or, from your keyboard, press to move up and to move down the list.

Open Lets you load the file that you specify in the **Open File Name** text field or that you highlight in the list box

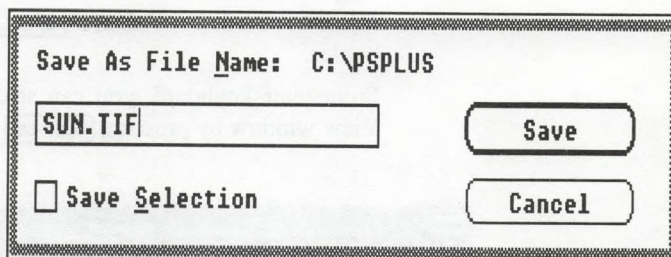
Cancel Lets you clear the dialog box without opening a file. Pressing also clears the dialog box.

☛ If you try to load a color file that has not been save in a compatible file format, an **Invalid File Format** error message appears. Click ☐ ☐ ☐ on OK or press to clear the error box.

4.3.3.1.2 Save

Lets you save all or a selected area of the current file to disk. This option lets you save all changes made to the current file since the last time you saved it. The WScan utility saves a file in either TIFF, PCX, or MSP file format. See *Page 77*.

Click ☐ on **F**ile to open the menu, then press ☐ on **S**ave. From your keyboard, press **Alt-F**, then press **S**. This displays the **Save As File Name** dialog box, as shown.





The text field lets you type the name of the current image. Press **Del** to clear the text field. Also, when you type text, the text field clears.



Save Selection Lets you save a selected area of the current image to disk. Click ☐ on the **Save Selection** option box to select it. An **X** appears in the option box. From your keyboard, press **Alt-S** to go to **Save Selection**. Press **S** to select the option box.


Save Click ☐ on **S**ave to save the file that you specify in the text field to disk, or press **Enter**.

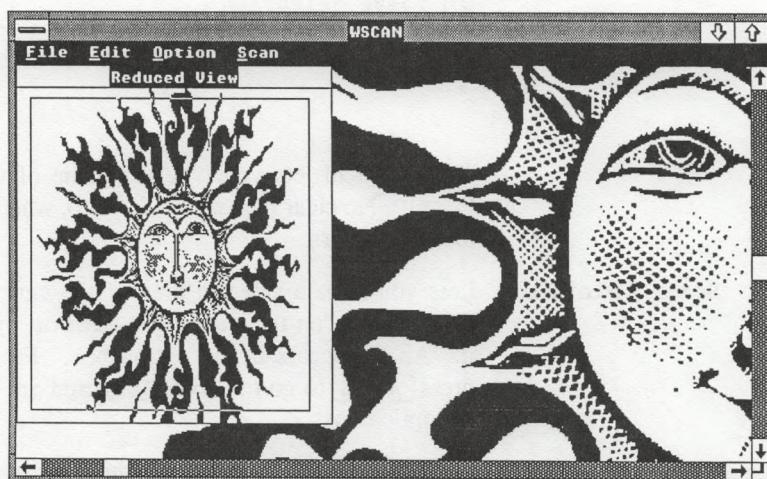
Cancel Click ☐ on **C**ancel or press **Esc** to clear the dialog box without saving the current image to disk.

How to Save a Selected Area of an Image

Step 1: Display the Reduced View window. Click  on Option to open the menu. Click  on Reduce View to display the Reduced View window. A ✓ appears when the option is enabled. The Reduced View window lets you view the whole image.

Step 2: Select the area you want to save. Position the cursor in the Reduced View window. Press and hold  while you drag the mouse down diagonally to the right to expand the selection border. Release  to secure the selection border.

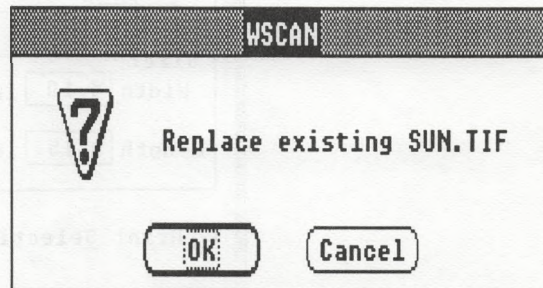
From your keyboard, you can select an area in the Reduced View window by pressing  and the cursor keys.



Step 3: Select **S**ave from the **F**ile menu. Click ☐ on **F**ile to open the menu, then press ☐ on **S**ave. From your keyboard, press **Alt-F**, then press **S**.

Step 4: Select the **S**ave **S**election checkbox. Point to the **S**ave **S**election checkbox in the **S**ave **A**s **F**ile **N**ame dialog box, and click ☐. Or, from your keyboard, press **Alt-S** to go to **S**ave **S**election, then press **S** to select the option box. An **X** appears in the checkbox when you select it.

Step 5: Save the selected area. Click ☐ on **S**ave or press **Enter**. The following prompt box appears to ask you if you want to WScan to replace the existing image with the selected area.



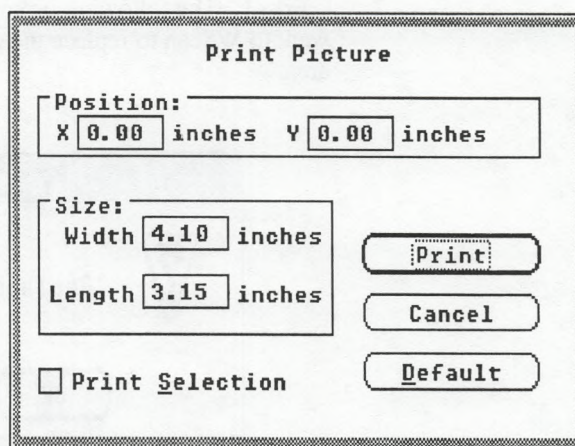
Click ☐ on **OK** to save only the area within the selection border to disk. Click ☐ on **Cancel** to clear the dialog box and proceed without saving the selected area.

- ☞ Selecting **S**ave **S**election when you have not selected a save area in the Reduced View window saves only the upper-left corner of the image to disk.

4.3.3.1.3 Print

Lets you print all or part of the current image file. By default, the WScan utility normally prints an image at the top-left corner of a page. The size of the printed image is the same size as the scanned image, though it looks larger in the WScan window.

Click ☐ ☐ ☐ on File to open the menu, then click ☐ ☐ ☐ on Print. From our keyboard, press **[Alt]-[F]**, then press **[P]**. The **Print Picture** dialog box appears, as shown.



The **Print Picture** dialog box is shown. It has a title bar with the text "Print Picture". Inside, there are two main sections: "Position:" and "Size:". The "Position:" section has two input fields: "X" with the value "0.00" and "Y" with the value "0.00", both followed by the unit "inches". The "Size:" section has two input fields: "Width" with the value "4.10" and "Length" with the value "3.15", both followed by the unit "inches". To the right of these fields are three buttons: "Print", "Cancel", and "Default". At the bottom left, there is a checkbox labeled "Print Selection".

Position Lets you specify the top margin (**X** axis) and left margin (**Y** axis) in the current unit of measure. The **X** and **Y** axis are defaulted to 0.00, which positions the image at the top-left corner of an 8 1/2- by 11-inch page. To change the print position, click left in the field and type in a new setting. From your keyboard, use **[→]** to move the cursor between fields. Press the cursor keys to move the cursor within a field.

Size Lets you change the size of the image you print. The width and length settings are defaulted to the current picture size unless you select the **Print Selection** box.

Print Selection Lets you print only a selected area of the current image.

Print Lets you print the current image with the settings you set in the **Print Picture** dialog box. A print message box appears and the printer icon also appears at the bottom-left corner of the screen. Click ☐ ☐ ☐ on **Print** or press .

Default Lets you select the default print settings. Click ☐ ☐ ☐ on **Default** or press .

Cancel Lets you abandon your print request and clear the dialog box from the window. Click ☐ ☐ ☐ on **Cancel** or press .

How to Print a Selected Area of an Image

Step 1: Display the Reduced View window. Click ☐ ☐ ☐ on **Option** to open the menu. Click ☐ ☐ ☐ on **Reduce View** to display the Reduced View window. A ✓ marks the **Reduce View** when you select it. The Reduced View window lets you view the whole image.

Step 2: Select the area you want to print. Position the cursor in the Reduced View window. Press and hold ☐ ☐ ☐ while you drag the mouse down diagonally to the right to expand the selection border. Release ☐ ☐ ☐ to secure the selection border. From your keyboard, you can select an area in the Reduced View window by pressing and the cursor keys.

Step 3: Select **Print from the **File** menu.** Click ☐ ☐ ☐ on **File** to open the menu, then press ☐ ☐ ☐ on **Print**. From your keyboard, press , then press .

Step 4: Select the **Print Selection checkbox.** Point to the **Print Selection** option box in the **Print Picture** dialog box, and click ☐ ☐ ☐. Or, from your keyboard, press to go to **Print Selection**, then press to select the box. An X appears in the checkbox when you select it.

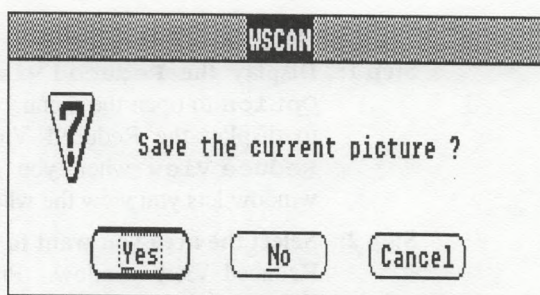
Step 5: Print the selected area. Click ☐ ☐ ☐ on **Print** or press .

4.3.3.1.4 Exit

Lets you exit the WScan window and return to the **MS-DOS Executive** screen. Click ☐ on **F**ile to open the menu, then click ☐ **E**xit. Or, press **(Alt)-F**, then press **E**.

You can also exit the WScan window by clicking ☐ on the Control menu to open it, then clicking ☐ on **C**lose. Or, press **(Alt)-F4**.

If you try to exit the WScan window without saving the current image, a prompt box appears, as shown, asking you to save the current picture before you exit.



Click ☐ on **O**K to save the current image before you exit the WScan window. Click ☐ on **N**o to exit without saving the current image. Click ☐ on **C**ancel or press **(Esc)** to clear the prompt box from the window.

4.3.3.1.5 About WScan

Lets you view the software copyright information. Click ☐ on **F**ile to open the menu, then click ☐ on **A**bout WinScan. Or, press **(Alt)-F**, then press **B**. This displays a box that contains the Logitech, Inc. logo, the WScan utility title, version number, and copyright information. Click ☐ on **O**K or press **(Enter)** to remove the box.



4.3.3.2 Edit Menu

The **E**dit menu contains one menu option – **C**opy. This option lets you copy all or a selected area of an image to the Windows® Clipboard.

4.3.3.2.1 Copy

Lets you copy a selected area of the current image to the Windows Clipboard. The Clipboard displays image files of 64K or less.

From the Clipboard, you can paste the copied area into another image file or other applications that run under Windows, like Aldus Pagemaker and Windows Paint. The contents of the Clipboard stays in tact when you open another file or exit the WScan window. The area you copy to the Clipboard stays in tact until you copy another area.

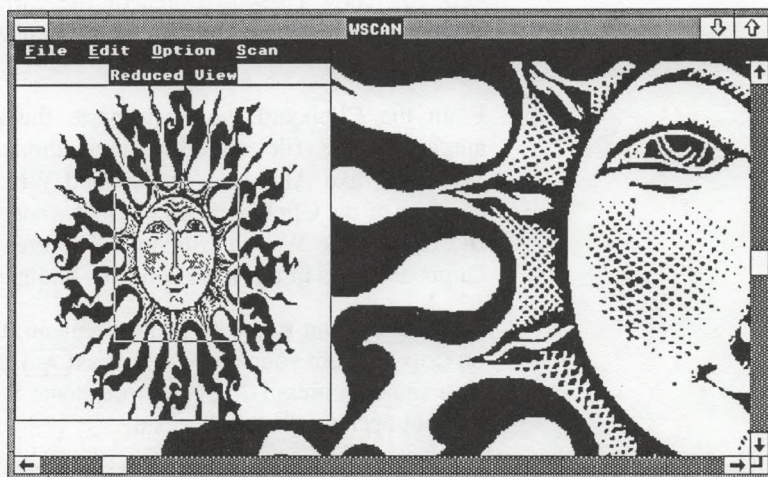
Click  on **E**dit to open the menu, then press  on **C**opy. From your keyboard, press **Alt-E**, then press **C**. You can also press **Ctrl-Ins** to execute the copy command without opening the **E**dit menu.

Copy is shaded and is unavailable for you to use until you select an area to copy.

The next section describes how to copy a selected area of an image to the Clipboard.

How to Copy to the Clipboard


Step 1: Select the area you want to copy in the **Reduced View** window. Press and hold ☐☐☐ while you drag the mouse to expand the selection border. Release ☐☐☐ to secure the selection border. Or, press ☐Spacebar and the cursor keys to select a copy area.

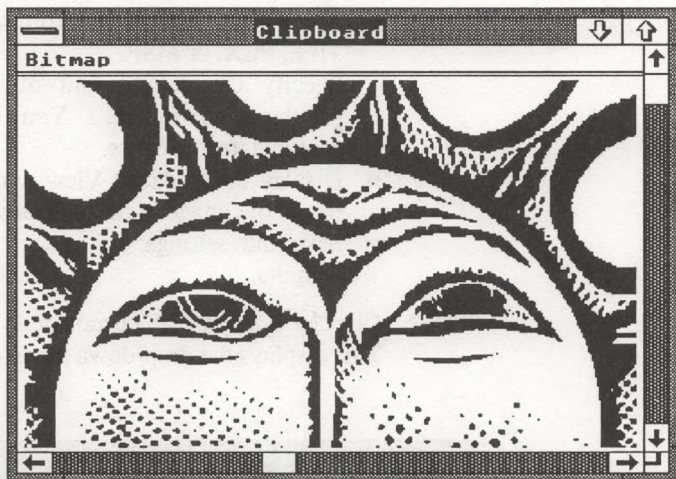




Step 2: Execute the **C**opy command. Click ☐☐☐ on **E**dit to open the menu, then click ☐☐☐ on **C**opy. From your keyboard, press ☐Alt-☐E, then press ☐C. Or, press ☐Ctrl-☐Ins. This copies the selected area to the Clipboard.



Step 3: Go to the **WINDOWS** directory. Minimize the WScan window by clicking ☐☐☐ on the minimize box. Or, press ☐Alt-☐F9.



From the MS-DOS Executive window, click ☐☐☐ on the appropriate drive icon to go to the root directory where you keep the **WINDOWS** directory. Click ☐☐☐ on **WINDOWS** to go to that directory. Or, open the **S**pecial menu and select **C**hange Directory. Type **WINDOWS** in the **C**hange To dialog box. Select **O**K to go to the **WINDOWS** directory. You see the list of files and subdirectories in the **WINDOWS** directory.

Step 4: View the Clipboard. Double click  on CLIPBRD.EXE. This displays the Clipboard window, as shown.



Step 5: Minimize the Clipboard window. Click  on the minimize box. Or, from your keyboard, press . This reduces the Clipboard window to an icon, which appears at the bottom-left corner of the screen.




Step 6: Load Windows Paint. From the MS-DOS Executive window, go to the PAINT sub-directory by double clicking  on PAINT.EXE. This displays the files in the PAINT sub-directory. Double click  on PAINT.EXE to load Windows Paint.

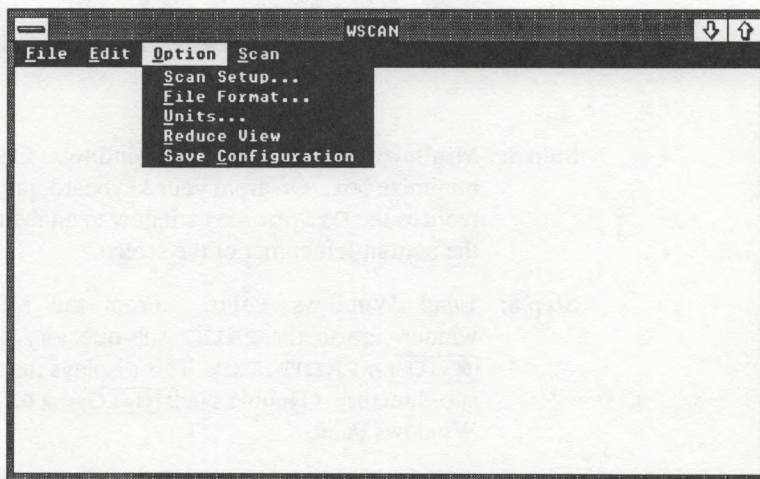
Step 7: Paste the copied area. From the Paint window, click  on Edit to open the menu, then press  on Paste. The contents of the Clipboard appears on the drawing board.

4.3.3.3 Option Menu

The Options menu lets you:

- Specify scanning settings before you scan.
- Specify the default file format. You can choose from TIFF, PCX, or MSP.
- Specify the default unit of measure for scanning or printing and image. You can choose from pixels, centimeters, or inches.
- Display the Reduced View window, which lets you view the whole image in the WScan window.
- Save the settings you select in the Option menu as defaults.

Click  on Option or press - to open the menu. This displays the drop-down menu options, as shown.

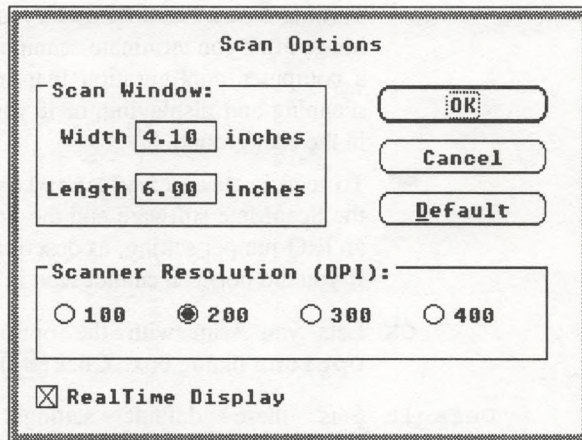


4.3.3.3.1 Scan Setup

Lets you set scanning settings, like scan width, scan length, and scanning resolution, before you scan.

Click ☐ ☐ ☐ on Option to open the menu, then click ☐ ☐ ☐ on Scan. From your keyboard, press , then press .

This displays the **Scan Options** dialog box, as shown.



The **Scan Options** dialog box is shown. It has a title bar with the text "Scan Options". Inside, there are two main sections. The first section is labeled "Scan Window:" and contains two input fields: "Width" with the value "4.10" and "inches", and "Length" with the value "6.00" and "inches". To the right of these fields are three buttons: "OK", "Cancel", and "Default". The second section is labeled "Scanner Resolution (DPI):" and contains four radio buttons with labels "100", "200", "300", and "400". The "200" radio button is selected. At the bottom of the dialog box is a checkbox labeled "RealTime Display" which is checked.

Width Lets you select a scan width. The maximum scan width is 4.10 inches; the width of the Scanning Window. Position the cursor in the field where you want to type and click ☐ ☐ ☐ . Press to clear the field. Then, type in a new setting. Press to move between fields.

Length: Lets you select a scan length. The default scan length is 6 inches. The actual length you can scan is dependant on the on available RAM in your computer. Position the cursor in the field where you want to type and click ☐ ☐ ☐ . Press to clear the field. Then, type in a new setting.

Scanner

Resolution (DPI) Lets you set the scanning resolution in dots per square inch (dpi). You can choose from 100 dpi, 200 dpi, 300 dpi, and 400 dpi. The default scanning resolution is 200 dpi. Click ☐ ☐ ☐ on an option to select it. A ● marks the command option you select.

RealTime Display Lets you see the image in the working area as you scan. An X appears in the option box when you select it and turn it on. The default setting is **RealTime Display** on.

Turning **RealTime Display** off lets you see the scanned image after you terminate scanning. This is useful if you have a computer configuration that interferes with simultaneous scanning and displaying, or if you have applications that run in the background.

☛ To scan in **RealTime Display**, you must have configured the ScanMate software and the ScanMan interface board with an IRQ jumper setting, as described in *Chapter 1, Installation*. If you did not, you cannot scan in **RealTime Display**.

OK Lets you scan with the options you set in the **Scan Options** dialog box. Click ☐ ☐ ☐ on OK or press .

Default Sets these default settings: **Width: 4.10 inches, Length: 6 inches** at 200 DPI in **RealTime Display**. Each DPI setting has a default length and width setting. Click ☐ ☐ ☐ on **Default** or press .

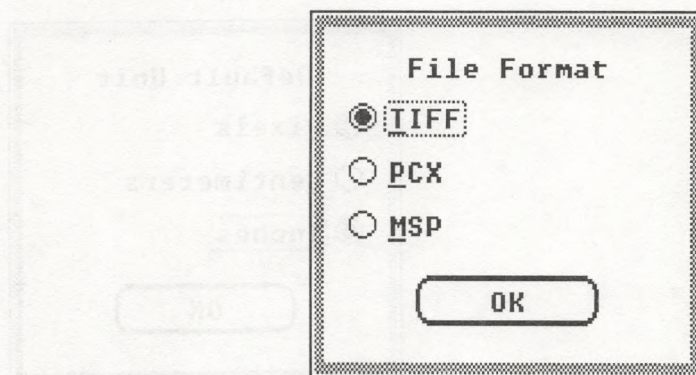
Cancel Lets you close the dialog box and cancel any change when you click ☐ ☐ ☐ on **Cancel** or press .

Note: You can save all of the settings you select in the **Scan Options** dialog box as defaults, by selecting **Save Configuration** from the **Option** menu.

4.3.3.3.2 File Format

Lets you specify the default file format for saving a file to disk. You can choose TIFF, PCX or MSP file format.

From the **File Format** dialog box, click ☐☐☐ on an option to select it, or press the key that corresponds to the underlined letter of that option name. A ● marks the option that you select.



TIFF The default file format setting lets you save an image file in the tagged image file format, which is compatible with applications, like PaintShow Plus, PageMaker, and WordPerfect 5.0.

PCX Lets you save an image file in the PC Paintbrush file format, which is compatible with applications, like LogiPaint, Ventura Publisher, and PC Paintbrush.



MSP Lets you save an image file in the Microsoft Paint file format, which is compatible with Windows Paint.

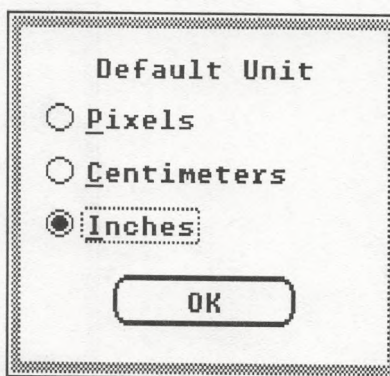
OK Lets you set the default file format that you select. Click ☐☐☐ on OK or press .


☛ To save the setting that you select as the default everytime you load the WScan window, open the Option menu and select Save Configuration.


4.3.3.3 Units

Lets you select the default unit of measure. From the **Default Unit** dialog box, you can choose from pixels, centimeters, or inches.

Click  on **Option** to open the menu, then click  on **Units**. From your keyboard, press **Alt-O**, then press **U**. This displays the **Default Unit** dialog box, as shown.



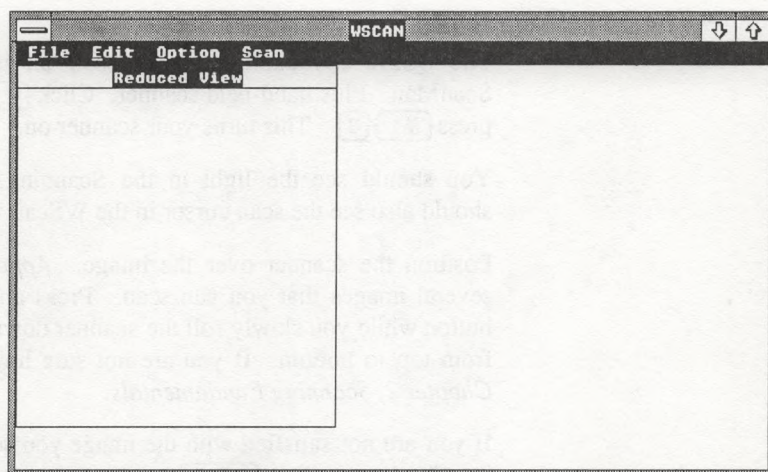
The default unit of measure is **Inches**. Click  on an option to select it. Or, press **P** to select **P**ixels, press **C** to select **C**entimeters, or press **I** to select **I**nches. A ● marks the option that you select.

Click  on **OK** or press **Enter** to set the default unit of measure that you select. Press **Esc** to clear the dialog box.

To save the setting that you select as the default everytime you load the WScan window, open the **Option** menu and select **Save Configuration**.

4.3.3.3.4 Reduce View

Lets you view the whole image in the Reduced View window that appears in the WScan window working area. This helps you to select an area of the current image to save or print. Click ☐☐☐ on Option to open the menu, then click ☐☐☐ on Reduce View. From your keyboard, press **Alt-O**, then press **R**. This displays the Reduced View window, as shown.



If Reduce View is shaded, it means that the current image is smaller than the WScan window working area and you do not need to reduce it to view it.






A ☒ marks Reduce View when you select it. To remove the Reduced View window, open the Option menu again and select Reduce View.

To move the Reduced View window within the WScan window, point anywhere in the title bar area, then press and hold ☐☐☐ while you drag the mouse.




To load the WScan window with or without the Reduced View window as a default, select Save Configuration from the Option menu.

4.3.3.3.5 Save Configuration

Lets you save the current settings as defaults that you select in any of the Option menu options.





Click  on Option to open the menu, then click  on Save Configuration. From your keyboard, press -, then press . This saves the current settings to disk.


4.3.3.4 The Scan Command

The Scan command lets you scan an image using the ScanMan™ Plus hand-held scanner. Click  on Scan or press -. This turns your scanner on.




You should see the light in the Scanning Window. You should also see the scan cursor in the WScan window.

Position the scanner over the image. *Appendix D* contains several images that you can scan. Press and hold the Scan button while you slowly roll the scanner down over the image from top to bottom. If you are not sure how to do this, see *Chapter 2, Scanning Fundamentals*.

If you are not satisfied with the image you scan, then re-scan it. To do so, click  on Scan again. A dialog box appears asking you if you want to save the current image. Click  on No or press -. This turns your scanner on, and you can begin to scan.

-  If there is not enough available RAM in your computer for the scan length that you set in the Scan Option dialog box, the following message appears

Not enough memory, truncation of the
picture length at <___ unit of measure>

Click  on OK proceed and scan at the truncated length. Click  on Cancel or press  to clear the message box. Then, minimize the WScan window and close other Windows applications to release some memory.

Chapter 5

The DosScan Utility

This chapter tells you how to scan an image from the DosScan utility – `SCAN.EXE`. The DosScan utility lets you scan an image from the DOS command line directly to a TIFF, PCX or IMG file. This lets you scan images for use in a variety of graphics and desktop publishing programs. This chapter also includes a reference section to help you understand the Scan parameters and to perform commands.

The DosScan utility replaces the `SCAN2TIF` and `SCAN2PCX` utility programs provided in the ScanWare™ 1.0 and 1.1 software packages.

The DosScan utility uses the graphic library of the PaintShow™ Plus program, and therefore supports the same graphics modes. See the *PaintShow™ Plus User's Manual*, Appendix A.

How to Scan an Image

Step 1: Enter the **SCAN** command. From the directory where you keep the ScanMate software, type:

SCAN

This takes you to the DosScan syntax screen that contains the available parameters. From the DosScan screen, type:

SCAN File

Where **File** is the name of the image file. This displays the DosScan screen, and turns your scanner on. You can scan with the default DosScan parameters. See *page 83*.

Step 2: Scan an image. *Appendix D* includes several images you can scan. Position the scanner over the image. Press and hold the Scan Button while you roll the scanner down over the image from top to bottom.

You see the image displayed on the screen in real-time *only* if you have configured the ScanWare software and the ScanMan interface board with an IRQ jumper setting.

Step 3: Terminate scanning. If the light is still on in the Scanning Window when you finish scanning the image, press any mouse button or a keyboard key to turn your scanner off.

Step 4: View the image on the DosScan screen. If the image is larger than the DosScan screen, you can scroll to bring other parts into view. See *DosScan Commands* on page 85.

Step 5: If necessary, rescan the image. If the image is satisfactory, save the image as described in *Step 6*. If the image is distorted or unsatisfactory, rescan the image by pressing **[F5]**. This clears the DosScan screen, and turns the scanner on.

Step 6: Save the scanned image. Press **[Enter]** or **[F3]** to save the scanned image and quit the DosScan utility. This saves the image to the file you specified in the **Scan** command.

Step 7: Quit the DosScan Utility. Press **[Esc]** or **[Shift]-[F3]** to clear the current image and quit the DosScan Utility. This takes you to the DOS prompt.

The Scan Parameters

You can specify **SCAN** parameters at the DOS prompt of the directory where you keep the ScanMate software by using the following syntax:

```
SCAN File[.TIF|PCX|IMG] [Width{In|Cm} [Length{In|Cm}]] [/|-R(100|200|300|400)]
```

(The parameters you specify are not case-sensitive. In other words, you can type them in upper or lower case letters.) The syntax to run the DosScan utility is:

SCAN Takes you to the DosScan syntax screen. From the directory where you keep the ScanMate software, type:

SCAN

File [.TIF|PCX|IMG] Lets you specify the image filename and the file format. The DosScan utility lets you scan directly to a .TIF, .PCX, or a .IMG file format. For example, type:

SCAN SAMPLE

The command above lets you scan an image with the following defaults:

- TIFF file format
- Width: 840 pixels (4.14 inches or 10.5 cm)
- Length: 1200 pixels (6 inches or 15.24 cm)
- Resolution: 200 dpi

To specify the PCX file format, type:

SCAN SAMPLE.PCX

[Width {In|Cm}] Lets you specify a scan width in pixels, inches or centimeters. The default width is 840 pixels (4.14 inches or 10.5 cm). This is the maximum scanning width. To specify a new width setting in inches or centimeters, you must include **In** or **Cm** after the width number, otherwise it will be interpreted as pixels. For example, type:

SCAN SAMPLE.PCX 3IN

[Length {In|Cm}] Lets you specify the length of the scanned image in pixels, inches or centimeters. The default length is 1200 pixels (6 inches or 15.24 cm) at 200 dpi. The maximum scan length that you can specify depends on the available RAM. You must first specify a width before you can change the length. To specify a length setting in inches or centimeters, you must include **In** or **Cm** after the length number, otherwise it will be interpreted as pixels. For example, type:

```
SCAN SAMPLE.PCX 3IN 5IN 
```

[/|-R(100|200|300|400)]

Lets you specify the scanning resolution in dpi. You can set the scanning resolution at 100, 200, 300, or 400 dpi. The default resolution is 200 dpi. The resolution setting must be preceded by a forward slash / or hyphen - and the letter **R**. To specify a scanning resolution of 300 dpi, type: /R300 or -R300. For example, type:

```
SCAN SAMPLE.PCX 3IN 5IN /R300 
```

The scanning resolution you specify in the **Scan** command must match the Resolution Switch setting on the scanner.

The higher the resolution setting, the more dots are used to compose the image. Thus, the image is larger on the screen. An image scanned at 400 dpi is larger on the screen and uses more memory than an image scanned at 200 dpi.

DosScan Commands

Command	Function
[Any Key]	Turns your scanner off. You can also press a mouse button. (Control keys that must be pressed in combination with another key will not turn your scanner off.)
[↑] [↓] [←] [→]	Scrolls the image up, down, left, or right in 16-bit increments. Press and hold a cursor key to scroll continuously.
[PgUp]	Scrolls the image up one screen at a time. Press and hold [PgUp] to scroll continuously.
[PgDn]	Scrolls the image down one screen at a time. Press and hold [PgDn] to scroll continuously.
[Ctrl]-[PgUp]	Scrolls the image to the right. Press and hold [Ctrl]-[PgUp] to scroll continuously to the right.
[Ctrl]-[PgDn]	Scrolls the image to the left. Press and hold [Ctrl]-[PgDn] to scroll continuously to the left.
[Home]	Scrolls to the top of the image.
[End]	Scrolls to the bottom of the image.
[F5]	Clears the screen so you can rescan the image.
[Enter] or [F3]	Saves the image and lets you quit the DosScan utility.
[Esc] or [↑Shift]-[F3]	Lets you quit the DosScan utility.

System Requirements

Appendix A System Requirements

To operate the ScanMan Plus hand-held scanner, and run the ScanMate software, you must have:

- Hardware**
 - IBM PC, XT, AT, PS/2 (Models 25 and 30) or a 100% compatible computer.
 - IBM PS/2 (Models 50 and above) or a 100% compatible computer.
- Operating System**
 - MS-DOS or PC-DOS 2.1 or later for IBM PC, XT, AT, PS/2 (Models 25 and 30).
 - DOS 3.3 or later for IBM PS/2 (Models 50 and above).
- Minimum Memory**
 - 384K RAM (black and white).
 - 640K RAM (16 colors).
- Disk Drives** One floppy drive and a hard disk.
- Expansion Slot** An available expansion slot for the ScanMan interface board.
- Graphics Board**
 - IBM CGA, EGA, MCGA, VGA or 100% compatible graphics adapter.
 - Logitech EGA.
 - Hercules Monochrome Graphics Adapter.
- Mouse** A Logitech Mouse or other compatible pointing device is required for use of the PaintShow Plus program.
- Mouse Driver** A mouse driver program (MOUSE.COM or MOUSE.SYS) should be loaded into memory before you operate the PaintShow Plus program.

You should use one of the following mouse drivers, an equivalent, or a later version : Logitech 3.4, Microsoft 6.11, Mouse Systems 5.6, or Dexxa 3.43.
- Operating Environment** (Optional) Microsoft Windows 2.03 or later to run the WScan utility.

Technical Specifications

Dimensions	136 mm x 138 mm x 36 mm (5.3 x 5.43 x 1.42 inches)
Weight	300 grams maximum (0.67 lb)
Reading Width	105 mm (4.13 inches) +/-3%
Scanning Speed	89 mm/s maximum (100 DPI) 44 mm/s maximum (200 DPI) 29 mm/s maximum (300 DPI) 22 mm/s maximum (400 DPI)
Effective Line	413 dots/line (100 DPI) 827 dots/line (200 DPI) 1240 dots/line (300 DPI) 1654 dots/line (400 DPI)
Cable Length	2.0 meters +/- 0.05m (78 inches), Shielded
Connector	8-pin mini-DIN
Current Consumption	400 mA maximum (at 12 V DC +/- 10%)
Light Source	Yellow/Green LED
Operating Force	500 gf maximum
Scan Modes	1 B&W, 3 Dithered Halftones
Halftones	32 Levels
DMA Channel	1, 2, or 3
I/O Port Address	280h, 2A0h, 330h, 340h
IRQ	none, 2, 3, 4, 5, or 7
Scanning Switch life	18000 Operations
Operating Temperature	0 to 40 degrees C.
Operating Humidity	25% to 85% RH Non-condensing
Storage Temperature	20 to 60 degrees C.
Storage Humidity	10% to 90% RH Non-condensing
MTBF (Except LED)	18000 hours

Appendix B Product Support Plan

Logitech offers firm product guarantees and an extensive range of services to ensure customer satisfaction.

Registration Card

Remember to send your registration card as soon as possible. It helps us to stay in contact with you, keeping you up-to-date with important product information.

3.5-Inch Disk Coupon

If you purchased the IBM PC/XT, AT, PS/2 (Models 25 & 30) and compatibles version of ScanMan Plus, and you need the 3.5" disk format, please fill out and return the coupon attached at the end of this manual.

Technical Support Hotline

You should rely on your manual or your dealer to answer questions about using your package. If you do encounter a technical problem with your package, our Technical Support Specialists will be glad to help you.

We ask that you to follow these steps before you call or write.

- Read the section of the manual that describes the procedure you are trying to perform.
- If the problem relates to your software, check to make sure that the software is properly configured.
- Read the *Appendix E, Common Questions and Answers*.

If it is still necessary to contact us regarding the PaintShow™ Plus program, please provide the following information:

- ✓ A brief description of the problem.
- ✓ The current ScanMan interface board jumper settings.
- ✓ The type and model number of your computer.
- ✓ The type and model number of your monitor and video card.
- ✓ The type of pointing device (e.g., Bus, Serial, or PS/2 mouse).
- ✓ Your version of DOS.
- ✓ A list of programs loaded in RAM.
- ✓ The contents of the AUTOEXEC.BAT and CONFIG.SYS files.

In the U.S. and Canada, call **(415) 795-0427**.

(Seven days a week.)



In Europe, call **++41-21-869-9851**.

Or, write to us at:

Logitech, Inc.
Attn: Technical Support
6505 Kaiser Drive
Fremont, CA 94555

If you write, please include your daytime phone number and the best time to reach you. Make sure to include "Attn: Technical Support" on the envelope. We want to help you make the most effective use of your package.

Logitech Bulletin Board Service (LBBS)

We know that effective communication with our customers is the key to quality service. Therefore we have set up the **LBBS** (Logitech Bulletin Board Service), an electronic bulletin board where you can contact us at your convenience, 24 hours a day, seven days a week.

To connect to the LBBS, you need a 300, 1200, or 2400 baud modem, and your communication parameters should be set to either: 7 bits, 1 stop bit, and even parity; or 8 bits, 1 stop bit, and no parity. Dial **(415) 795-0408**. The menu of available options is self-explanatory.

Byte Information Exchange (BIX)

Logitech also sponsors an electronic conference on BIX, the **BYTE INFORMATION EXCHANGE** system from Byte magazine. If you have access to BIX, join us in the Logitech conference, and communicate with us there.

We are always working on expanding our Bulletin Board Service support. Please call us for an updated list of electronic conference.

Customer Service Hotline

Contact our Customer Service Hotline for the following: faulty disk replacement, upgrade and update information, product warranty, and non-technical questions.



In the U.S. and Canada, call **415-795-0801**.

In Europe, call **++41-21-869-9851**.

Customer satisfaction is our main concern. We periodically enhance our products to add new features in response to our customer's needs and comments. We appreciate your request for new features; your comments help us improve our products for you.

Appendix C The Scanner Driver

You can choose to have the ScanMate installation program install the scanner driver `HHSCAND.SYS` to your `CONFIG.SYS` file automatically, or you can add it manually from a text editor or a word processor in the unformatted text mode. The parameters shown here are the default settings and may not necessarily be the correct settings for your computer. However, all of the scanner driver parameters must be present for you scanner to work properly. When the scanner driver is included in your `CONFIG.SYS` file, you can install the ScanMate software into any directory.

The syntax for the scanner driver is:

```
DEVICE=C:\HHSCAND.SYS /A=280 /I=3 /D=1 /H=4:8&:12:16 /W=103 /T=15
```

C:\HHSCAND.SYS The path where `SCANINST` copies the device driver file. If you prefer to keep the `HHSCAND.SYS` file with your other ScanMate files, the string in your `CONFIG.SYS` file should contain the following statement:

```
DEVICE=C:\PSPLUS\HHSCAND
```

/A=280 The board base I/O address (hexadecimal). Other possible values are: 2A0, 330, and 340.

/I=3 The interrupt channel number. **/I=0** indicates the "No Interrupt" setting. Other possible values are: 2, 3, 4, 5, and 7.

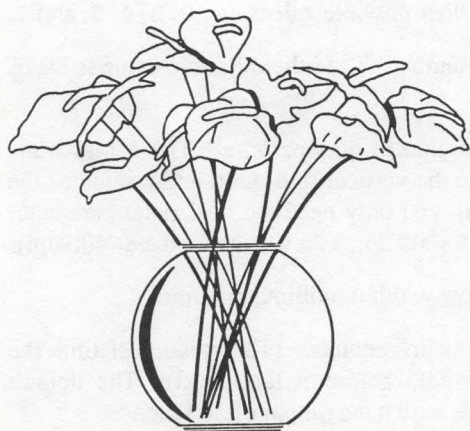
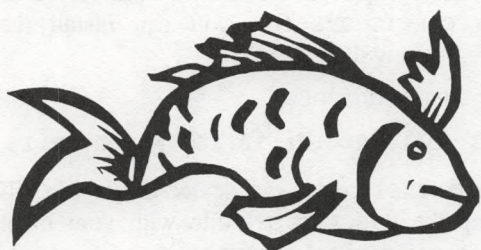
/D=1 The DMA channel number. The other possible value is DMA channel number 3.

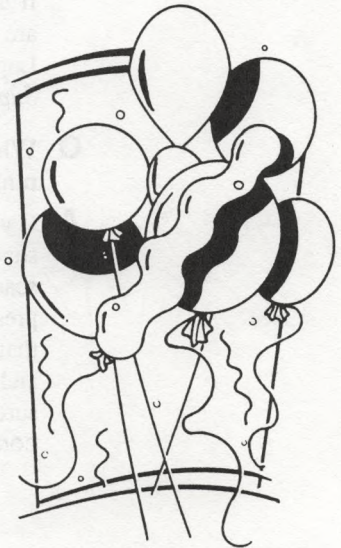
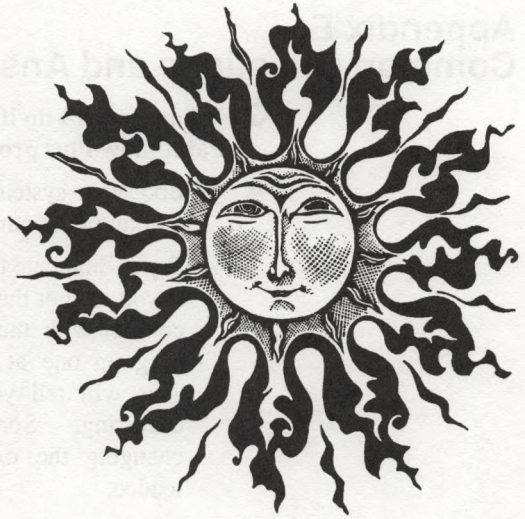
/H=4:8&:12:16 The horizontal resolution in dots per/mm. The **&** marks the default value. Since the vertical resolution is the same as the horizontal resolution, you only need the horizontal parameter value. (4=100 dpi, 8=200 dpi, 12=300 dpi, and 16=400 dpi)

/W=103 The scanner's window width in millimeters (mm).

/T=15 The device's time out in seconds. (The amount of time the scanner can be left idle before it turns off.) The default timeout is 15 seconds with a maximum of 30 seconds.

Appendix D
Scan Image Gallery





Appendix E Common Questions and Answers

Q What should I do if I experience a problem while using the PaintShow Plus program?

- A**
- Boot your system from an original DOS disk with a bare minimum in your AUTOEXEC.BAT and CONFIG.SYS files.
 - Try to duplicate the problem.
 - If you cannot duplicate the problem, then there must be a conflict with the resident software. Load each resident program one at a time until the problem occurs again. This will tell you with which software the conflict is occurring. Sometimes you can solve a conflict by changing the order in which the resident software is loaded.

Check the software user's documentation for any specifications or recommendations. For instance, Logitech recommends that the mouse software be loaded before any other resident software.

If the problem still occurs, and the specific problem that you are experiencing is not covered in this section, then call the Logitech Technical Support hotline (see *Appendix B, Product Support Plan*.)

Q Why is the Scan option shaded on the PaintShow Plus main screen and the Auxiliary screen?

- A** If you do not have a ScanMan hand-held scanner the option is shaded and you cannot use it. However, if you do have a scanner, the PaintShow Plus program should detect the presence of the ScanMan hand-held scanner. Check to see that you have installed and configured the ScanMate software and interface board correctly for your computer. Also, make sure the scanner driver – HHSCAND.SYS – is present in your CONFIG.SYS file. See *Chapter 1*.

Q Why does my scanner turn on, but there is no image when I scan?

A Make sure the DMA, IRQ, and Address jumper settings selected on the interface board matches the setting you selected in the ScanMate installation program. Also, check the Brightness Control dial on your scanner. If the dial is at the brightest setting, you may not be able to see the image

Q Why won't the light in the Scanning window turn off?

A This generally indicates a conflict with resident software (see the first answer on *page 96*), or a DMA channel conflict. See *Chapter 1*.

Q Why do dithered images that I print look blotchy?

A Dithered images are made up of patterns of dots. These patterns simulate various shades of gray. When these patterns are scaled down, they form other patterns. This causes a blotch effect when you view a dithered image on the Auxiliary screen or when you print. To prevent this, do not rescale the image. If the image is too big, scan at a lower resolution. If you scale the image when you print, you lose some of the detail. Therefore, scan to match the print resolution.

Q Why does my scanner turn off as soon as I start scanning?

A There may not be enough RAM in your computer to scan the image, especially if you're scanning at 300 or 400 dpi. See *Chapter 2, page 39*.

Q Why is my scanned image on screen so much larger than the original?

A This occurs because your image is displayed at a lower resolution than you scanned. The size of your screen image depends on: your monitor's size and your video mode (VGA, EGA, CGA, etc.). For instance, if your display is 72 dpi and you scan an image at 200 dpi, an image appears three times larger on screen. This has no effect on the output. The image output is determined by the picture settings and the printer setup. If you want to use the screen image for display, scan at 100 dpi and/or resize the image.

Appendix D - Common Questions and Answers

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